

Mathew J. Manimala · Princy Thomas  
*Editors*

# Entrepreneurship Education

Experiments with Curriculum, Pedagogy  
and Target Groups

 Springer

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# Preface

Entrepreneurship is generally understood as the process of starting a new venture with the intention of generating sustainable profits and venture growth, where the by-products for the society and the nation are employment generation, wealth creation and the general economic development of the country. New ventures in an economy are like new sprouts in an ecosystem, without which the system will stagnate and perish. While the ventures will have to generate profits in order to sustain themselves and grow (which is true even for government, not-for-profit organizations and NGOs, for whom it is in the form of surpluses), the society and the nation would benefit from the products and services (often innovative) offered, employment generated, wealth created, taxes paid as well as the overall development of the economy and the improvements in the quality of life being brought about. It is because of such general benefits to the society and the economy that governments, especially in developing countries, are keen about promoting entrepreneurship among their citizens. Among the several initiatives and support mechanisms adopted for stimulating entrepreneurial behaviour among the youth of the country, entrepreneurship education has a prominent place.

Starting primarily as a means to facilitate new venture creation among unemployed persons (particularly the skilled ones among the war veterans), entrepreneurship education has undergone a lot of changes in its aims, curriculum, pedagogies and target groups. The aim of entrepreneurship education is no longer restricted to the creation of new ventures. It is now broadened to include the development of enterprising behaviour, which is needed for everyone irrespective of whether one is self-employed or employed by others. For the latter, it takes the form of ‘intrapreneurship’ training, and for everyone, there is a focus on the development of traits, motives, knowledge and skills (especially those needed for entrepreneurs and intrapreneurs). With the change in the aims, there are corresponding changes in the target groups, curriculum and pedagogies. It was to capture these changes and their implications for entrepreneurship education that we organized an international academic conference on the theme, *Entrepreneurship Education and Training: Design, Delivery and Effectiveness*, at Indian institute of

Management Bangalore (IIMB) during 29–31 January 2015, with the International Consortium for Innovation and Entrepreneurship (ICIER) as the principal partner.

The conference was organized in collaboration with a few other national and international institutions and agencies. They included the four other founder members of ICIER (from Italy, Brazil, Russia and China, in addition to IIMB from India), the International Entrepreneurship Forum (IEF), the Council for Small Business and Entrepreneurship (CSBE) India, European Business and Technology Centre (EBTC) and the Art-for-Economy (Milano-Bicocca, Italy). Out of the 250 odd abstracts submitted to the conference, about 100 were selected after a rigorous review process for presentation at the conference. The papers presented at the conference were subjected to further reviews so as to make a final selection of 19 papers to be included in this edited volume (*Entrepreneurship Education: Experiments with Curriculum, Pedagogy and Target Groups*). The selection was based on the research quality as well as their suitability for the theme of the book, which, as the title suggests, is on the ‘experiments’ done with curriculum, pedagogy and target groups of entrepreneurship education. In other words, the focus of this book is on the innovations attempted on the above-mentioned aspects of entrepreneurship education. While the innovations discussed in the papers are mostly within India, we also wanted to provide the reader with an overview of what is happening in the field in other countries, especially in the developed part of the world, which is provided in the introductory chapter (Chap. 1: ‘Entrepreneurship Education: Innovations and Best Practices’).

This book, therefore, attempts to present a holistic picture of the field of entrepreneurship education and highlights the ‘experiments’ and innovations happening in a developing country like India. We hope that our readers will find this book useful for enhancing their understanding of the field and appreciating the Indian scenario of entrepreneurship development. It would be of particular relevance for policy-makers, consultants, trainers and educators in the field of entrepreneurship. We dedicate this book to entrepreneurship educators and to the upcoming breed of educational entrepreneurs in India.

Bangalore, India

Mathew J. Manimala  
Princy Thomas

# Acknowledgements

As we have mentioned in the Preface, this book was developed with the help of 19 selected papers from the Fourth ICIER-IIMB International Conference on ‘Entrepreneurship Education and Training: Design, Delivery and Effectiveness’, held at Indian Institute of Management Bangalore (IIMB) during 29–31 January 2015. We are indebted to the conference and its organizers for making this happen. The founding partner institutions of the ICIER (International Consortium for Innovation and Entrepreneurship Research) network and their representatives are gratefully remembered for their contributions. The ICIER Network was created at IIM Bangalore in 2011 at the initiative of Prof. Mathew J. Manimala and Mr. P. K. Thomas in partnership with: (1) Prof. Fabio Corno of Milano-Bicocca University, Italy; (2) Prof. Renata Lebre La Rovere of Instituto de Economia, Universidade Federal do Rio de Janeiro (UFRJ), Brazil; (3) Prof. Elena Pereverzeva of Moscow International Higher Business School (MIRBIS), Russia; and (4) Prof. Zhao Youzhen of Fudan School of Management, Fudan University, Shanghai, China. We thank them all.

Among the national and international agencies that collaborated with the ICIER conference, the contributions of the following distinguished scholars/professionals are specially appreciated: (1) Prof. Jay Mitra, Founder of International Entrepreneurship Forum (IEF) and Professor, Business Enterprise and innovation, Essex Business School, University of Essex, UK; (2) Prof. Y. K. Bhushan, Founder-President, Council for Small Business and Entrepreneurship (CSBE), India, and Vice-Chancellor, ICFAI University, Mumbai; (3) Ms. Leena Pishé Thomas, Regional Director (Bengaluru) of European Business and Technology Centre (EBTC); and Dr. Stefano Colombo, Founder-Director of ArtforEconomy (Milano, Italy).

In the various stages of conference administration, we received a lot of help (academic as well as administrative) from several of our associates. We gratefully acknowledge the scholarly guidance and assistance provided by Prof. P. D. Jose and Prof. Jay Mitra in reviewing and evaluating the papers for acceptance as well as for the awards, and the academic and administrative support provided by

Mr. P. K. Thomas, Mr. Siji Cyriac, Mr. Abhishek Bhati, Dr. K. Poornima Wasdani, Ms. Kokila Jayashree, and Ms. Vishnupriya Hymavathi. Secretarial and other related support was provided by Mrs. R. Gowri and Mr. N. Ravi. The general academic and administrative support received from various departments of IIM Bangalore (including the infrastructure facilities) added great value to the conference. Subsequently, many of the IIMB faculty helped us with the review of papers for their final selection into the edited volume. We extend our heartfelt thanks to all of them.

Last but not least, we thank the Springer team (particularly Sagarika Ghosh, Nupoor Singh and Sathya Karuppaiya) who worked with us in bringing out a quality publication as expeditiously as possible.

Mathew J. Manimala  
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**Part I**  
**Introduction**

# Chapter 1

## Entrepreneurship Education: Innovations and Best Practices

Mathew J. Manimala and Princy Thomas

**Abstract** Entrepreneurship education has become a priority for policy-makers especially in developing countries. Such interventions in the education system are expected to create a culture of entrepreneurship in the society and thereby bring economic benefits through the enterprising behaviour of individuals resulting in better performance of existing organizations as well as creation of new ventures. While the process appears to be simple and straightforward, the experiences have often belied the expectations. The fact that it is rather difficult to assess the long-term impact of entrepreneurship education adds to the confusion and ambiguities. Educators therefore have been tinkering with various aspects of entrepreneurship education and training in the hope of arriving at the best design. Obviously, this has led to many innovations in the curriculum, pedagogy, target groups and institutions involved in entrepreneurship education. The present paper attempts to document these innovations and best practices under a ‘WHAT-HOW-WHO-WHERE’ framework to capture the four domains of activities involved. Based on a comprehensive review of the literature, we have developed a fairly comprehensive picture of what is happening in the field and proposed a theoretical model highlighting the dual role of entrepreneurship education, namely developing enterprising individuals in the society and providing knowledge and skills required for enterprise creation.

**Keyword** Entrepreneurship education • Curriculum • Pedagogy • Target groups • Innovation • Best practices

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## 1 Introduction

Entrepreneurship education has become a priority for policy-makers and is developing as a field of study (Singh 1990). Its popularity with policy-makers, academics, researchers and trainers could be legitimately attributed to its positive impact on new venture creation (Petridou et al. 2009; Menzies and Tatroff 2006; Menzies and Paradi 2003; Charney and Lidecap 2000) and thereby on the economic development of the country (Carree and Thurik 2010; Thurik and Wennekers 2004) which has been observed by many researchers. While there is a group of researchers who believe that entrepreneurs are born and not made, there are some research evidences to the contrary, based on which these researchers have defined entrepreneurship as an attitude that can be learned (Robinson and Haynes 1991; Solomon et al. 2002). The collective view of this group can be summarized by the following statement of Gorman et al. (1997, p. 63): ‘Entrepreneurship can be taught, or at least encouraged, by entrepreneurship education’. Other researchers offer support to this view when they observe that entrepreneurship education helps to develop entrepreneurial intention (Bae et al. 2014; Liñán 2004; Volery and Müller 2006; Liñán et al. 2010), entrepreneurial traits and competencies (Alcaraz-Rodriguez et al. 2014; Mitchelmore and Rowley 2010; Morris et al. 2013; Charney and Libecap 2003) as well as entrepreneurial potential (Krueger and Brazeal 1994), besides having a positive impact on student propensity and intentionality to create new ventures (Pittaway and Cope 2007).

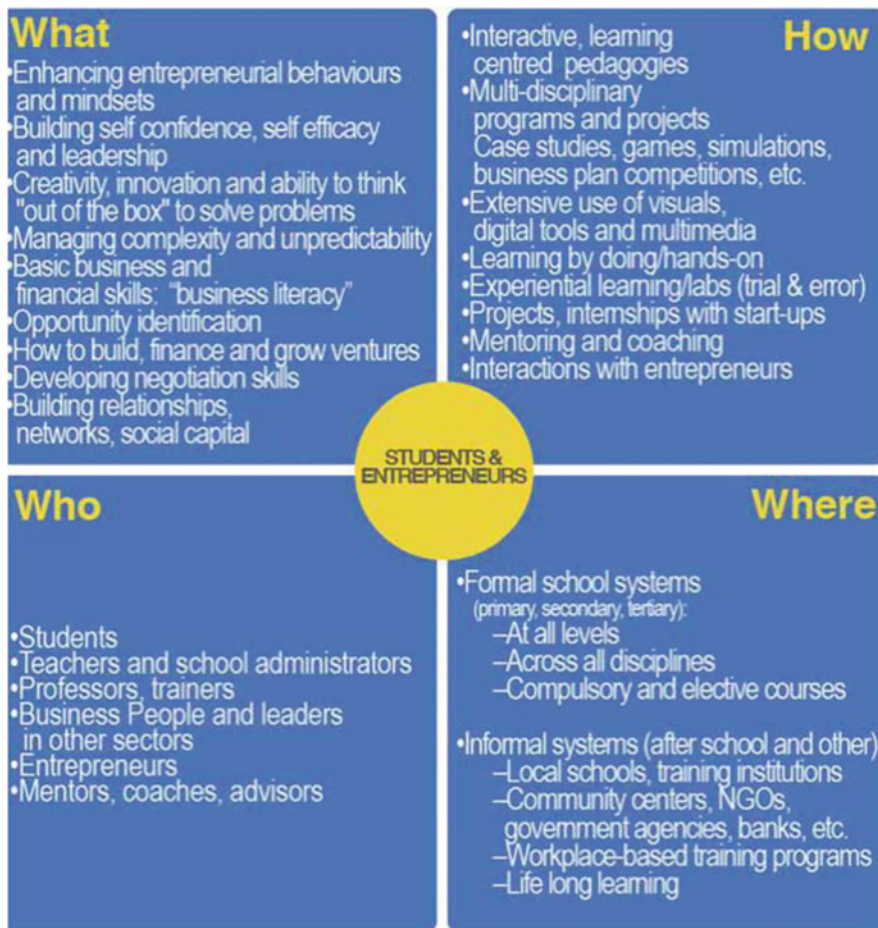
It is obvious from the studies cited above that the impact of entrepreneurship education on entrepreneurial behaviour is mediated by entrepreneurial intentions, which are often identified as one of the best predictors of entrepreneurial behaviour (Kolvereid 1996). Entrepreneurial intention is defined as a mental process that orients and guides the planning and implementation of a new business idea (Boyd and Vozikis 1994; Gupta and Bhawe 2007). Support for the linkages between entrepreneurship education and entrepreneurial behaviour (with or without the mediation of entrepreneurial intention) was also found in the study by Dickson et al. (2008, p. 245), who observed that ‘there was a significant and positive correlation between participation in the [entrepreneurship] educational programmes and selection into entrepreneurship’. While it is possible that such observed relationships may be the result of a ‘self-selection’ process rather than because of the impact of training—that is, people with entrepreneurial inclinations ‘self-select’ themselves into entrepreneurship education programmes and later take up entrepreneurial activities—the aggregate findings of research are that educational programmes do have a positive impact on the attitudes and behaviour of the individuals so as to make them more entrepreneurial.

Recognizing the role of education in the development of human capital, some researchers have highlighted the contribution of human capital to the development of entrepreneurship (Corbett 2007; Davidsson and Honig 2003; Martin et al. 2013). According to Volery et al. (2013), there are four types of human capital assets

related to entrepreneurship, which are as follows: (1) entrepreneurship-related personality traits, including the need for achievement, entrepreneurial self-efficacy, pursuit of professional autonomy, risk propensity and innovation propensity; (2) beliefs that support entrepreneurial activity, including the perceived desirability and feasibility of one's plans and actions; (3) entrepreneurial knowledge; and (4) entrepreneurial competencies. Though these four types of assets are proposed to be different from one another, researchers' definitions of the fourth asset suggest that it is an all-encompassing term that includes the other 'assets' as well. See, for example, Man et al. (2002) who defined entrepreneurial competencies as the total ability of the entrepreneur to perform a job-role successfully. The definition by Bird (1995) is even more elaborate about the details and lists all other assets as part of entrepreneurial competencies, as she defines it as the underlying characteristics such as specific knowledge, motives, traits, self-images, social roles and skills, which contribute to venture birth, survival and/or growth.

The mediation of entrepreneurial behaviour in the relationship between learning and entrepreneurial achievement is observed in many studies (Rae 2000; Gibb and Scott 1985). In other words, the proposition in this regard is that learning influences the development of entrepreneurial behaviour which in turn has an impact on entrepreneurial achievement (Rae and Carswell 2000). While it is generally presumed that the impact of learning on entrepreneurial behaviour and achievement is positive, it need not be the case always. In fact, it would depend on the nature and content of learning. It is in this context that there is a felt need for entrepreneurship education, where the aim is to impart knowledge, skills and attitudes to individuals so as to enhance their entrepreneurial behaviour and achievement. Obviously, the effectiveness (Volery et al. 2013) of such education will depend largely on the design and implementation of these programmes, which may be defined by the WHAT-HOW-WHO-WHERE aspects of these programmes, as depicted in Fig. 1. The evolution of entrepreneurship education is closely associated with the changes made in these design parameters, which have led to periodic innovations in the content, methodology, target groups and the levels of these programmes. This chapter proposes to trace the evolution of entrepreneurship education, with special emphasis on the innovations and best practices introduced in the process in the above-mentioned four aspects.

The WEF model (reproduced in Fig. 1) provides a framework for discussing the innovations being carried out in entrepreneurship education. As a prelude to this discussion, it is necessary to understand how entrepreneurship education differs from other kinds of education, especially from business/management education. Hence, this paper will be divided into two major parts, where Part-I deals with the nature of entrepreneurship education and how it differs from other types of education and Part-II with innovations in the above-mentioned four aspects of entrepreneurship education.



**Fig. 1** Entrepreneurship education—contents, methods, target groups and levels (Reproduced from World Economic Forum 2009)

## 2 Part-I: Entrepreneurship Education (Nature, Types and Approaches)

### 2.1 *Entrepreneurship Education: Features and Focus Areas*

There are differences in the positioning of business education and entrepreneurship education. Business education prepares students to work for others’ businesses (Grey 2002), whereas entrepreneurship education prepares them for starting their own business. Hence, it is but natural that there are differences in the way these two

programmes are designed and taught. The primary focus of entrepreneurship education, therefore, is in the identification and development of the necessary entrepreneurial qualities, skills and competencies, although potential entrepreneurs would also need an initiation into the functional areas of management, as provided in an MBA programme.

Entrepreneurship education is defined by Young (1997), as the structured formal imparting of entrepreneurial knowledge (which is nothing more than a tautological definition, providing very little explanatory information). A similar definition is provided by Fiet (2000a) who defines entrepreneurship education as the structured formal conveyance of entrepreneurial competencies, consisting of the concepts, skills and mental awareness used by individuals during the process of starting and developing their ventures. Often a different definition brings out a different perspective on the phenomenon, which may be illustrated by reproducing a few other definitions below. According to Jones and English (2004, p. 416), entrepreneurship education is 'a process of providing individuals with the ability to recognize commercial opportunities and the insights, self-esteem, knowledge and skills to act on them'. Bécharad and Toulouse (1997) define entrepreneurship education as a collection of formalized teachings that informs, trains and educates anyone interested in business creation, or small business development. According to Liñán (2004), entrepreneurship education is a specialized programme designed for developing an awareness of the 'career options' available for entrepreneurs and assisting them in choosing an entrepreneurial career. It guides interested candidates for choosing an alternative career path to employment and focuses on the development of entrepreneurial skills and attitudes (Maritz and Brown 2013).

While most of these definitions attempt to give an overall picture, there are also others that focus on the components of entrepreneurship education. One such definition is provided by Kirby (2004), who identifies three types of entrepreneurship education programmes based on their primary objectives, which can be: (1) to create an orientation/awareness of new enterprise formation and the tasks and skills associated with it, (2) to promote self-employment, or economic self-sufficiency; and (3) to facilitate the survival and growth of entrepreneurial businesses, especially the small- and medium-sized ones. A similar classification based on the objectives identified from the literature was made by Gibb (1999), who too picked up three, where the focus is on the impact of the programme on the learner. The three types of impact, as identified by other researchers, are compiled by him to explain that entrepreneurship education is expected to help the participants: (1) to understand entrepreneurship (Chen et al. 1998); (2) to acquire entrepreneurial skills (London and Smither 1999); and (3) to learn how to initiate business start-up (Kierulff 2005; Solomon et al. 2002).

The ruling paradigm about entrepreneurship development at one time was that entrepreneurs are born, and not made. From this position, researchers are slowly moving to a 'trainability paradigm', which explains the growing popularity of entrepreneurship education in today's society (Kuratko and Hodgetts 1998; Kuratko 2005). Included among the many benefits of formal education and experiential learning identified by researchers are: the stimulation of entrepreneurial activities by

the lessons learned from formal education as well as experiences of successes and failures (Politis 2008); creation of new ventures based on such learning (Petridou et al. 2009; Menzies and Tatoff 2006; Menzies and Paradi 2003); development of new models by transforming ideas/knowledge into new initiatives to bring about economic growth; channelizing of entrepreneurial energy to facilitate social change; and creation of an entrepreneurial mindset so as to enable the participants to introduce innovations in their everyday practice. In order to help participants derive maximum benefits from entrepreneurship education, academic institutions will have to adopt a collaborative approach with industries and other stakeholders (venture capitalists, bankers, service providers, consultants, trainers, corporate executives and entrepreneurs), which would also facilitate innovation and economic development.

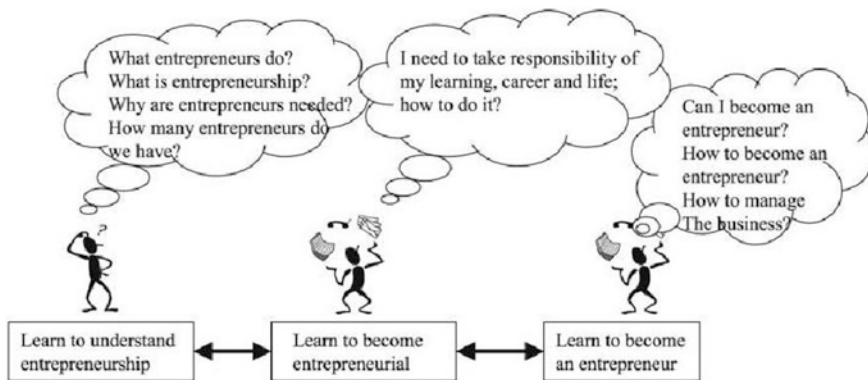
Initiatives for entrepreneurship education in universities are getting manifested in different forms such as programmes, institutes, centres, departments and schools (Solomon 2007). Their interfaces are also multidimensional. Jones and Matlay (2011) proposed 10 interrelated systems within the larger system of entrepreneurship education. They are as follows: (i) student-educator; (ii) student-educational processes; (iii) student-institution; (iv) student-community; (v) educator-educational processes; (vi) educator-institution; (vii) educator-community; (viii) educational processes-institution; (ix) educational processes-community; and (x) institution-community.

As the process of entrepreneurship education becomes increasingly complex with the involvement of various stakeholders and the corresponding modification of objectives and methodologies, the terms used to describe the process have also evolved. Currently, the term 'entrepreneurship education' is often used interchangeably with 'enterprise education' (Hynes 1996) and 'entrepreneurial education' (Jones and English 2004). While some scholars like Gibb (1994) argued that these are conceptually the same but can be contextually different, others like Jones and Iredale (2010) believe that they are different. According to the latter authors, the main difference between entrepreneurship education and enterprise education is in their focus. The focus of entrepreneurship education is primarily on the needs of the entrepreneur (emphasizing the traditional didactic learning), whereas enterprise education addresses the requirements of a wider range of stakeholders, including consumers and the community (with special emphasis on the process). Table 1 provides a listing of the differences in the focus of entrepreneurship education and enterprise education. It is also clarified that the enterprise education approach allows greater student ownership of the learning process.

As may be seen from the focus areas listed in the table, 'enterprise education' is broader in scope than 'entrepreneurship education' and often includes the latter. Highlighting such broader scope of the former, Gibb (1999) identifies three stages of learning within enterprise education. They are based on the content of the learning involved, wherein the participants focus on: (1) learning to understand entrepreneurship, (2) learning to become entrepreneurial and (3) learning to become an entrepreneur (see Fig. 2 for a pictorial representation of the three stages).

**Table 1** The focus of entrepreneurship education and enterprise education (Jones and Iredale 2010)

The primary focus of entrepreneurship education is on	The primary focus of enterprise education is on
<ul style="list-style-type: none"> <li>• How to start a business including the key processes of business start-up</li> <li>• How to plan and launch a new business venture</li> </ul>	<ul style="list-style-type: none"> <li>• An active learning enterprise education pedagogy</li> <li>• Knowledge needed to function effectively as a citizen, consumer, employee or self-employed person in a flexible market economy</li> </ul>
<ul style="list-style-type: none"> <li>• How to grow and manage a business</li> </ul>	<ul style="list-style-type: none"> <li>• The development of personal skills, behaviours and attributes for use in a variety of contexts</li> </ul>
<ul style="list-style-type: none"> <li>• Enhancing the necessary skills and behaviours needed to run a business</li> </ul>	<ul style="list-style-type: none"> <li>• The person as an enterprising individual—in the community, at home, in the workplace or as an entrepreneur</li> </ul>
<ul style="list-style-type: none"> <li>• The deployment of entrepreneurial skills and knowledge in a business context</li> </ul>	<ul style="list-style-type: none"> <li>• The use of enterprising skills, behaviours and attributes throughout the life course</li> </ul>
<ul style="list-style-type: none"> <li>• Imminent use of the knowledge and skills needed to start a business; and self-employment</li> </ul>	<ul style="list-style-type: none"> <li>• How a business, particularly a small business, works</li> </ul>



**Fig. 2** The roles of enterprise education in its three different stages (Reproduced from Gibb 1999)

## 2.2 Types of Entrepreneurship Education

Similar to the attempts at classifying enterprise education, there have been attempts at identifying different types of entrepreneurship education as well. For example, Jamieson (1984) has identified three types of entrepreneurship education, which he describes as: (1) education about enterprise, (2) education for enterprise and (3) education in enterprise. *Education about enterprise* deals mostly with awareness creation and has the specific objective of educating students on the various aspects



of setting up and running a business mostly from a theoretical perspective. The second category, *education for enterprise*, deals more with the preparation of aspiring entrepreneurs for a career in self-employment, with the specific objective of encouraging participants to set up and run their own business. The third category, *education in enterprise*, deals mainly with management training for established entrepreneurs and focuses on ensuring the growth and future development of the business. It is aimed at helping individuals or groups to adopt an enterprising approach, irrespective of the type of organization for which they work.

Similar classifications are provided by other researchers as well. For example, Laukkanen (2000) uses almost the same terminology, but has only two categories, namely *education about entrepreneurship* and *education for entrepreneurship*. This is because he combines the second and third categories of Jamieson (1984) into one. Accordingly, *education about entrepreneurship* has its focus more on the theories related to entrepreneurs, firm creation and contribution to economic development as well as on the details about the creation and management of small- and medium-sized firms. This type of education provides the required inputs to the specific groups targeted for starting business. In other words, this is primarily for the potential entrepreneurs, whereas the second category, namely *education for entrepreneurship*, addresses both the present and the potential entrepreneurs with the objective of developing and stimulating the entrepreneurial process, providing all the tools necessary for the start-up of a new venture both within and outside an existing organization. Since the programme design and content have to be changed according to the target group, the categorization provided by Jamieson (1984) may prove to be more useful to entrepreneurship educators.

### ***2.3 Approaches in Entrepreneurship Education***

Examining the various teaching methods and technologies used in different learning contexts, it is customary for researchers to classify them into traditional and innovative (Hytti and Gorman 2004; Pittaway and Cope 2007; Fayolle 2010; Spiteri and Maringe 2014; Maritz et al. 2014). The traditional techniques are often characterized as teacher-centric where the student involvement is passive. They include lectures, formal presentations often with slides, guided discussions in groups or on an individual basis, formal seminars, workshops, preparation of notes and essays, evaluation and grading based on knowledge acquired. The more innovative techniques are designed as student-centric experience-based action-oriented projects and include action research, case studies, understudy with practitioners, simulation exercises, practical workshops and application of theoretical learning in real-life situations. It is often pointed out that an innovative education necessitates a custom-designed pedagogy approach (Jossberger et al. 2010; Maritz et al. 2014), which is recommended for entrepreneurship education as well.

Researchers have repeatedly pointed out the inadequacies of the traditional approach for teaching entrepreneurship and advocated the adoption of experiential

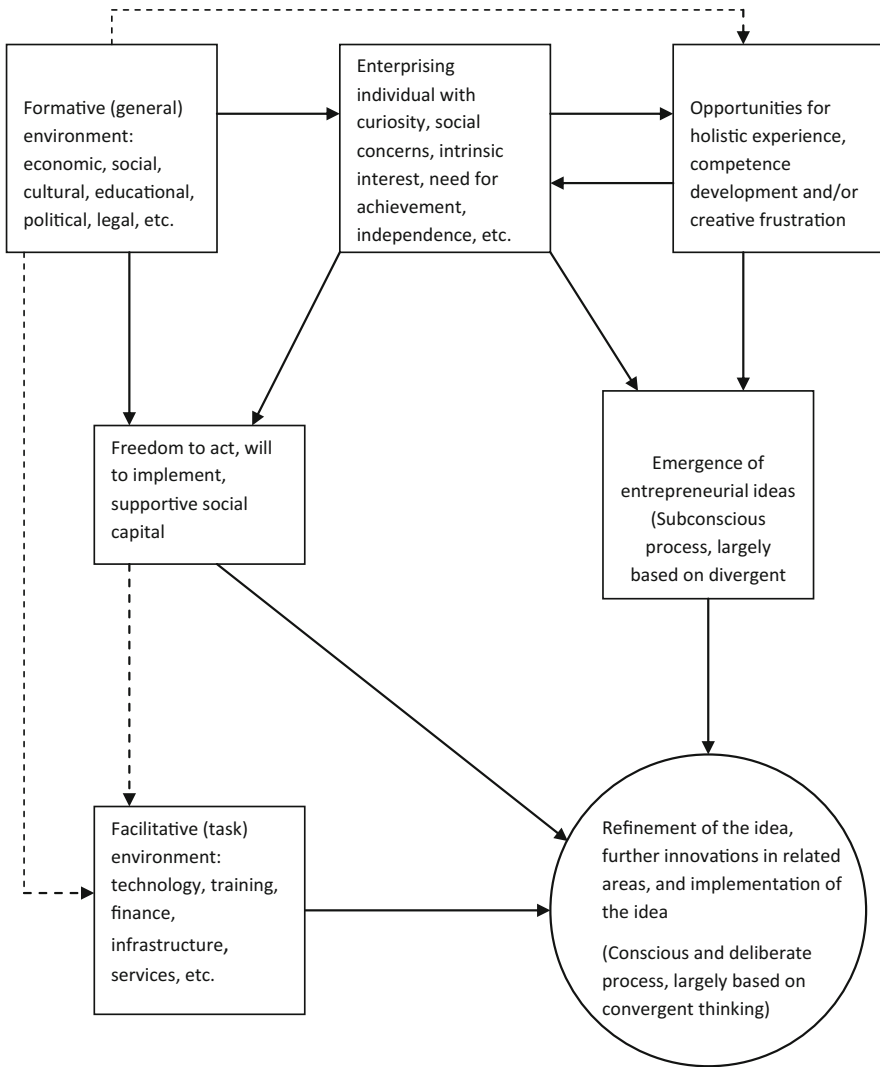
**Table 2** The focus of learning in the traditional versus entrepreneurial approaches (Gibb 1987)

Traditional approach focus on	Entrepreneurial approach focus on
The past	The future
Critical analysis	Creativity
Knowledge	Insight
Passive understanding	Active understanding
Absolute detachment	Emotional involvement
Manipulation of symbols	Manipulation of events
Written communication and neutrality	Personal communication and influence
Concept development	Skill development

methods for the latter (Gibb 1987, 1994, 1996, 2002; Davies and Gibb 1991; Gorman et al. 1997; Fiet 2000b; Kirby 2004; Sogunro 2004; Jones and Iredale 2010; Heinonen and Poikkijoki 2006). According to them, the main problem of the traditional education is the kind of orientation being promoted by it. The focus in the traditional education is on the past, critical analysis, knowledge acquisition, passive understanding of the phenomenon with absolute detachment from it, manipulation of concepts through symbols, written communication and neutrality in controversial issues. On the other hand, in entrepreneurial education the focus should be on the future, creativity, insight, active understandings, emotional involvement, manipulation of events and personal (mostly oral) communication with the intention of influencing others. While the traditional approaches to teaching may inhibit the development of the requisite entrepreneurial attitudes and skills, the entrepreneurial education is expected to actively promote such attitudes and skills. The contrast between the two approaches is highlighted by Gibb (1987), which is reproduced in Table 2.

Consistent with the different foci needed for entrepreneurship education, there have to be differences in the methodologies employed. The traditional methods such as lectures, presentations and handouts should be replaced by videos, case studies, group discussions and role-plays (Henry et al. 2005a). Such methods will also have to vary according to the different stages in the process of venture creation and management which, according to Béchard and Toulouse (1997), are the following: (1) orientation and awareness; (2) new venture creation; and (3) venture management, with special emphasis on addressing the survival and growth issues. Besides, they should enable the entrepreneurial individuals to address the issues related to the different ‘worlds’ they have to deal with, which are explained by Neck and Greene (2011) using a fourfold typology, as listed below: (1) the entrepreneurial world, where the main issue is to develop the confidence that the entrepreneur can and should act as a hero; (2) the process world, where they learn how to plan and predict; (3) the cognition world, where they learn how to think and act; and (4) the method world, where they learn how to create value by logically applying their knowledge in the real environment and acting upon them. In view of the fact that entrepreneurship is a holistic activity involving idea generation and





**Fig. 3** Creativity and entrepreneurship: a conceptual model (Manimala 2009). Note Dotted lines indicate weak or long-term influences

implementation, entrepreneurs should be skilled in both lateral (divergent) as well as vertical (convergent) thinking. In a model developed by Manimala (2009), it is suggested that the divergent thinking capabilities are required more in the early phase of idea generation, and the convergent thinking capabilities are required more in the later implementation phase of venture creation (see Fig. 3).

Accordingly, a holistic education for entrepreneurship should also incorporate training in both these skills, namely the skill for generating new ideas and discovering new directions in resolving problems and the skill for developing such

**Table 3** Differences between vertical thinking and lateral thinking (Barak and Doppelt 1999)

Vertical thinking	Lateral thinking
Is selective	Is generative
Moves only if there is a direction in which to move	Moves in order to generate a new direction
Is sequential	Can make jumps
Has to be correct at every step	One does not have to be
Uses the negative to block off certain pathways	There is no negative
Concentrates and excludes what is irrelevant	Welcomes chance instructions
Categories, classifications and labels are fixed	They are not
Follows the most likely paths	Explores the least likely
Is a finite process	Is probabilistic
Rightness is what matters	Richness is what matters
Selects a pathway by excluding other pathways	Seeks to open up other pathways
Selects the most promising approach to a problem	Generates many alternative approaches

ideas further and checking them against objective criteria (de Bono 1970). These two types of thinking are known as divergent (lateral) thinking and convergent (vertical) thinking. The contrasting characteristics of the two types of thinking (as proposed by Barak and Doppelt 1999) are reproduced in Table 3.

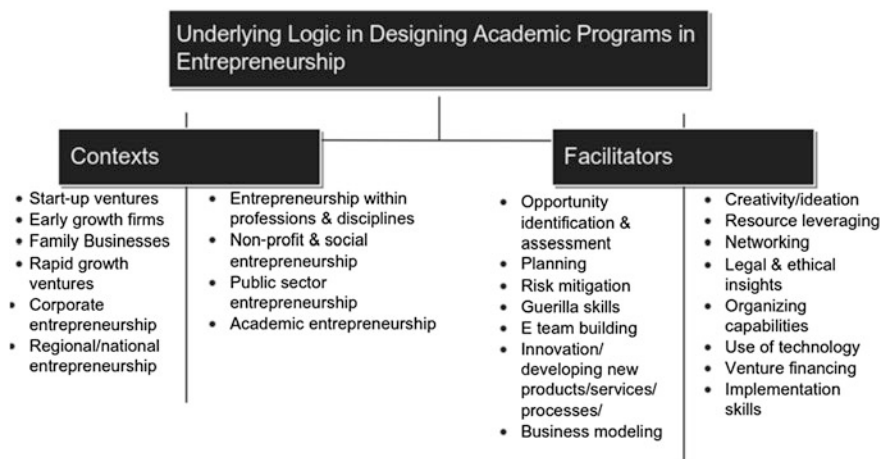
It may be noted that in the left brain (vertical/convergent thinking) approaches to learning, the emphasis is on developing critical or vertical thinking that is objective, analytical and logical and results in one or, at the most, only a few answers. In contrast, creative thinking is lateral, imaginative and emotional, which helps in developing multiple associations and thereby leading to more than one solution (de Bono 1970). Since entrepreneurs encounter several problems requiring innovative solutions, it is important for them to develop creative (lateral/convergent) thinking skills. However, education systems generally tend to follow left brain approaches to learning (Kirby 2004). Entrepreneurship education, therefore, has to develop an additional focus on training in creative (right brain) thinking (Kirby 2004).

### **3 Part-II: Innovations in Entrepreneurship Education— The ‘WHAT-HOW-WHO-WHERE’ Framework**

#### ***3.1 Content of Entrepreneurship Education Programmes: Innovations in WHAT to Teach***

The content of an academic programme in entrepreneurship should vary according to the target group being addressed. The target groups for such programmes could be as diverse as new start-ups, small businesses, family businesses, franchisees, corporate entrepreneurs, social ventures as well as participants of various

**Table 4** A model to guide programme design in entrepreneurship (Morris et al. 2013, p. 78)



professional courses, such as engineering/technology, management, agriculture, health care, music, dance and fine arts. The courses for each of these groups would need to have customized content. Besides, there could be courses for the facilitators of such groups. In general, it could be prescribed that for the entrepreneurs (including aspiring ones), the focus should be on developing entrepreneurial knowledge, skills and competencies, whereas for the general participants it could be the development of entrepreneurial behaviour in any walk of life they would choose to be in (Morris and Kuratko 2014). A listing of factors to be considered when designing an entrepreneurship programme is provided in Table 4.

Researchers have used various criteria for identifying the ideal curriculum for entrepreneurship courses. Kourilsky (1995), for example, based his analysis on the processes involved in the act of new venture creation and identified three components for the curriculum, namely opportunity recognition, marshalling and commitment of resources, and the creation of an operating business organization. Opportunity recognition is the process of identifying the unfulfilled needs in the marketplace and developing ideas for products or services to fill those gaps. Marshalling resources is a function of the individual’s willingness to take risks as well as skills in securing outside investment. Finally, the creation of an operating business organization to deliver the product or service requires the knowledge and skills in the functional areas of management such as operations, marketing and finance. Viewed from a different perspective, the course content of entrepreneurship programmes can be broadly classified into two types, one that focuses on skills to start the business and the other on skills to manage small and medium enterprises (Gürol and Atsan 2006).

Entrepreneurship courses should, therefore, focus on the behavioural characteristics of entrepreneurs (Noll 1993) so as to enhance their implementation skills.

**Table 5** Curriculum content for Personal and Enterprise development objectives (Vesper and Gartner 2001)

Personal development	Enterprise development
Concept of entrepreneurship	Identifying and evaluating opportunities
Characteristics of an entrepreneur	Commercializing a concept
Value of entrepreneurship	Developing entry strategies
Creativity and innovation skill	Constructing a business plan
Entrepreneurial and ethical self-assessment	Finding capital
Networking, negotiating and deal making	Initiating the business
	Growing the business
	Harvesting strategies

Hence, the curriculum goals should be: (1) to help participants learn to develop ideas by recognizing business opportunities, researching customer requirements, conducting self-assessment of personal creativity, conducting feasibility studies and identifying various business entry strategies; (2) to prepare them to start a business by assessing personal resources and financial status, researching and evaluating the risks associated with getting started, writing a working business plan and approaching others for money and other resources; (3) to familiarize them with the process of building a viable business by learning to allocate resources, using various marketing strategies, and managing money and personnel.

Ideally, a course on entrepreneurship should combine the two perspectives (namely, ‘behavioural’, focusing on the person, and ‘process’, focusing on the enterprise) mentioned above. In other words, the course should help participants with personal development and equip them with the knowledge and skills required for enterprise development. While examining the curriculum structure at the University of Tasmania, Vesper and Gartner (2001) identified the course contents that fall under each of these two categories (see Table 5).

Though the general prescription about designing entrepreneurship courses is that the content should vary according to the objectives, most programmes nowadays tend to be practice-oriented so as to promote new venture creation by students. Researchers, especially those documenting the perceptions of students, have observed that the practice-oriented approach has been found more useful by them. In a study conducted among Polish students by Jones et al. (2011), it was observed that the contents perceived as useful were those that enhanced the idea-generation capability of students and helped them apply their new ideas in real-time scenarios. According to Solomon (2007), entrepreneurship courses should offer the students opportunities to ‘experience’ entrepreneurship and small business management. Other researchers too have emphasized the need for stimulating creative thinking in practice-based situations (Hamidi et al. 2008; Spiteri and Maringe 2014).

Perceptions on the relevance of courses would depend largely on the client groups’ needs and service providers’ orientations. In general, academics tend to focus more on pre-venture creation process and less on management of existing businesses, as was observed by Ibrahim and Soufani (2002) about Canadian

universities. A similar orientation is seen in one of the older prescriptions by McMullan et al. (1985) who suggested that entrepreneurship education should be structured around a series of strategic development challenges including opportunity identification and feasibility analysis; new venture planning, financing and operating; new market development and expansion strategies; and institutionalizing of innovation. In contrast to the academics, entrepreneurs tend to give greater value to the functional management courses, as it was observed in a study conducted among 100 entrepreneurs who attended a management programme at Harvard Business School, who felt that it was the functional area courses such as analytical thinking, accounting, finance, marketing, management information systems and manufacturing that are among those aspects of entrepreneurship that can be taught (Timmons and Stevenson 1985; Henry et al. 2005b). This is but natural, as these entrepreneur-respondents have already crossed the venture-creation stage and are grappling with the issues of managing their businesses.

In order to ascertain the students' value-perceptions of different types of entrepreneurship courses, Hanti et al. (2008) created three types of learning projects and compared students' perceptions of the learning outcomes in those three types of entrepreneurial learning environments. The first one was based on the simulated project of running a virtual company, the second on establishing a student cooperative and using it to serve real customers, and the third on making real-life business projects for real customers on a contractual basis, that is, doing outsourced or consultancy-based tasks. The students felt that doing real-life projects was the most beneficial learning environment, as it offered the possibility of learning to make things happen through communication with customers as well as fostering the development of managerial skills.

Since universities have to serve different types of clientele, they often tend to offer an eclectic mix of courses. Alternatively, in some cases they offer a variety of short programmes suitable for the different client groups. In Harvard Business School, for example, the Arthur Rock Center for Entrepreneurship offers 33 graduate-level courses on entrepreneurship and found that the graduates of these courses consistently start more businesses than the graduates of other courses. This centre conducts annual New Venture Competition which awards the winner an amount of \$150,000. Besides, they also provide investment support ranging from \$10,000 to \$20,000 for graduates who are pursuing new ventures. Alumni meet through the biannual entrepreneurial summit gathers alumni with demonstrated early-stage venture-creation initiatives to motivate students to pursue their careers as entrepreneurs. 'Entrepreneurs-in-residence' programme invites accomplished founders and funders to spend time at the university one day a week to advise students aspiring to be entrepreneurs. In general, the programme content at Harvard has three main components, namely evaluating opportunities, securing resources, and sustaining and growing the enterprise (Gottlieb and Ross 1997).

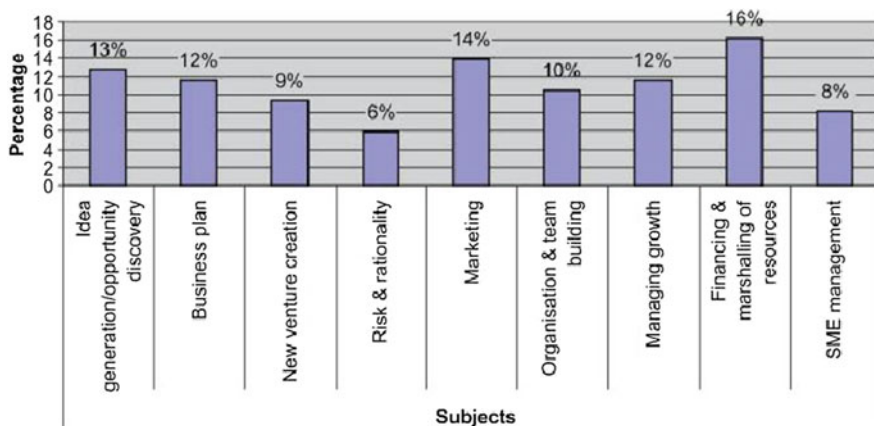
The major components of the course content do not vary much across universities. This can be illustrated by examining the course content of a few other universities from the USA as well as other countries. The entrepreneurship course at North Georgia Technical Institute focuses on the following topics: knowledge of

the characteristics of an entrepreneur; ability to recognize business opportunities; basic skills and knowledge to prepare a feasibility plan for a business venture; ability to identify the various business entry strategies available to entrepreneurs; and understanding the methods to collect the market information needed to evaluate the feasibility of a new business concept (Roach 1999). The entrepreneurship programme of the University of Tasmania has a similar structure, where the major components of the course content are opportunity recognition, commercialization, marshalling of resources in the face of risk and initiating a business venture (Jones and English 2004; Kourilsky 1995). There are a variety of courses offered in South African universities with different focus areas, such as entrepreneurship, small business management, new venture creation, family business management, innovation and technology management, franchising, small business finance, venture capital, creativity management and growth management (Jesselyn Co and Mitchell 2006).

The variations in course content will be more explicit when the course offered has a specialized focus. For example, Strathclyde University has a specialized focus on entrepreneurship, technological innovation and environmental entrepreneurship in their entrepreneurship course. Accordingly, the contents of their course are different from those of others and includes topics such as innovation management, strategic technology management, design management, design methods, supply chain management, people organization for technology management, product development project and global design management, supplemented by optional modules to be selected from a range of design, technology and innovation subjects, including product design techniques, enterprise resource planning, engineering risk management, systems integration, information management, sustainable product design and manufacturing, product costing and financial management, fundamentals of Lean Six Sigma, and systems thinking and modelling. (<https://www.strath.ac.uk/>).

A similar but much shorter programme with technological orientation is being organized by Nanyang Technopreneurship Centre (NTC) in Singapore (Kangaslahti 2008) with a practice-oriented methodology. NTC has a four-month postgraduate diploma course called the Technopreneurship and Innovation Programme (TIP). In this programme, lectures are delivered by successful local entrepreneurs as well as enterprise development experts such as angel investors, IP lawyers and venture capitalists. The participants would also visit numerous start-up companies in Silicon Valley, Seattle and Shanghai and study the process of commercializing business plans for new technological business ideas. Thus, the programme is practical, offers hands-on experience in all facets of entrepreneurship and focuses on giving the students a network and other tools for starting their own business (Kangaslahti 2008).

The relative importance of the subjects in an entrepreneurship programme has also been ascertained by researchers. One such study was conducted by Menzies and Gasse (1999) based on the offerings of Canadian universities. The percentages of universities offering the different courses are available in Fig. 4. As may be



**Fig. 4** Relative importance of subjects taught in entrepreneurship courses: Canadian data (Mwasalwiba 2010)

expected, the major concerns are around finance, marketing, business idea and business plan.

The subjects and percentages mentioned in Fig. 4 were identified by Mwasalwiba (2010) after a review of 21 articles. As may be noted from the bar-chart the more popular subjects are the following: (1) marshalling and finance (16%); (2) marketing and salesmanship (14%); (3) idea generation and opportunity discovery (13%); (4) business planning (12%); (5) managing growth (12%); (6) organization and team building (10%); (7) new venture creation (9%); (8) SME management (8%); and (9) risk and rationality (6%). The other subjects which were ranked below 6% were legal issues, management of innovations and technology, franchising, family business, negotiation skills, communication skills, and problem-solving.

Similar observations about the diversity of courses are made by Bygrave (1994) after examining the curricula of several universities, where the topics covered are as diverse as the following: the entrepreneurial process, opportunity recognition, entry strategies, market opportunities and marketing, creating a successful business plan, financial projections, venture capital, debt and other forms of financing, external assistance for start-ups and small business, legal and tax issues, intellectual property, franchising, harvesting and entrepreneurship economics. On the other hand, there are prescriptions about being focused on the critical competencies such as attributes, behaviours, attitudes, skills (Kirby 2004; Kuratko 2003), communication, creativity (de Bono 1995), critical thinking, assessment, leadership, negotiation, problem-solving, social networking and time management (Ray 1997).

Taking an overall perspective, Vesper (1998) identified four types of knowledge required by entrepreneurs, which are as follows: (i) *business general knowledge* (knowledge about new and established firms); (ii) *venture general knowledge* (knowledge about the general characteristics of a particular type of ventures); (iii) *opportunity specific knowledge* (knowledge about the existence of an un-served

market and/or about the resources needed/available for venturing into it); and (iv) *venture-specific knowledge* (knowledge on how to produce a particular product or service).

#### **4 Pedagogy of Entrepreneurship Education Programmes: Innovations in ‘HOW’ to Teach**

Entrepreneurship educators have been experimenting with many more pedagogical tools than those engaged in general education (Kuratko 2005; Solomon et al. 2005). This is because of the need for stimulating action and changing attitudes, which are critical for enabling individuals to create new ventures. In order to bring about changes in attitudes, especially those of risk-taking and learning from mistakes, it is important to use non-conventional, action-oriented teaching methods (Ibrahim and Ellis 2002). Hence, the teaching of entrepreneurship should be seen as a multiphase process which integrates a triggering event, knowledge, experience and action (Heinonen 2007), and consequently, it has to adopt teaching methodologies that are different from those of management education (Grey 2002).

McMullan and Long (1987) stressed the importance of teaching entrepreneurship using hands-on experience, real-world projects and learning-by-doing situations. Stumpf et al. (1991) suggested the introduction of behavioural simulations. Highlighting the difference between general and entrepreneurship education, Gibb (1994) stated that in the general education learning happens mostly in the class room and evaluation is done through the assessment of written examination outputs, but in entrepreneurship education, learning happens while and through doing, and the performance is assessed by the success of these actions in producing the desired results. Other researchers are of the view that, in entrepreneurship education, teachers can use a judicious combination of the in-class and outside-class pedagogical methods. Solomon et al. (2002), in a review of 240 programmes of entrepreneurship education in the USA, found that in-class pedagogies using case studies and lectures helped the participants to develop their business plans. The outside-class pedagogical methods such as consultancy work for and internships with small businesses helped them to implement their business plans later.

Changes recommended for the methods of teaching entrepreneurship are a reflection of the underlying teaching philosophy, according to which the role of the teacher should also change. The teaching philosophies held by a teacher would depend on the assumptions (conceptualizations) held about the three components of the teaching system. According to Béchard and Grégoire (2005), there can be three different types of conceptualizations on each of these three components of the teaching system (namely, *to teach*, *a teacher* and *students*): (1) *to teach* may be conceptualized as: to impart information; to ensure the appropriation of knowledge; and/or to converse with the students about knowledge; (2) *a teacher* may be conceptualized as: a presenter; a facilitator and tutor; and/or a coach/developer; and



(3) *students* may be conceptualized as: passive recipients; participants; and/or active participants in the construction of their knowledge. The first set of conceptions is consistent with an objectivist philosophical paradigm, and the second set of conceptions is in line with a subjectivist philosophical paradigm, whereas the third set of conceptions is a combination of the first two and may be described as an interactionist philosophical paradigm (Béchar and Grégoire 2005). It is this third paradigm that is often recommended for entrepreneurship education, as indicated in the prescription by Löbler (2006), who pointed out the need for a constructivist approach for teaching entrepreneurship, where the role of the teacher is not that of the governor of the students' learning process but that of a supporter of the learning process governed by the students. In other words, the teacher should act as a coach and facilitator to help students to find their own solutions to the emerging problem situations and direct them to the resources they need to solve such problems.

Teaching methods, in general, can be classified into two broad categories, namely pedagogy and andragogy (Taylor and Kroth 2009b). Pedagogy is a teacher-centred system, where the instructor is seen as a transmitter of knowledge and evaluator of the learner. In contrast, andragogy is a learner-centred system, where the instructor acts as a facilitator of learning (Taylor and Kroth 2009a, cited in Rowland-Jones 2012). Andragogic learning focuses on solving problems and generating new knowledge (Rowland-Jones 2012). Since entrepreneurship education is aimed at stimulating actions on the part of the learners, it has to be more of an andragogic nature than pedagogical. The former tends to be performed outside-class whereas the latter are mostly inside. According to Jesselyn Co and Mitchell (2006), the in-class methods include lectures, group discussions, case studies, preparation of business plans, address by guest speakers, desk-research projects, videos, role-plays, computer simulation and workshops/seminars and the outside-class learning tools commonly used are internships, on-site visits, small business consulting, community development, feasibility studies, etc.

While emphasizing the importance of learning-by-doing for entrepreneurship education, San Tan and Ng (2006) too have highlighted the need for outside-class activities such as internship with start-ups, creating and running small ventures on campus and working on small consulting jobs. An example of how this practice-orientation is implemented in an actual programme is the 'Learning-by-Developing' approach adopted by Laurea University of Applied Sciences in Finland (Laurea 2006; Taatila 2010). The students of this programme develop their own real business plans and/or work on the growth plans of their existing businesses with the support of the academic staff as well as successful serial entrepreneurs. There is a strict requirement in this programme that all the data in the plans should be authentic and that the students have a genuine personal interest in taking the business forward after their course.

While the general pattern of learning activities in entrepreneurship courses is in favour of outside-class projects, there can be a lot of variations in the methods of teaching, depending on the level and objectives of the course. In a study of South African universities, Jesselyn Co and Mitchell (2006) collected data from eight

traditional universities and four universities of technology, which have been conducting entrepreneurship education from 1990 to 2002. The pedagogy used for Undergraduate, Masters, Diploma and PhD levels were found to be different in these universities. For the Undergraduate level, the most commonly used in-class method is the lecture (65%), followed by creation of business plans (58%), discussions (55%), case studies (52%) and guest speakers (45%). For the Masters level, the most common in-class methods used are: research projects (45%), discussions and case studies (45%) and lectures (32%). For the PhD level, research projects (23%) are the most common in-class method used. For the Diploma level, which is predominantly for the aspiring entrepreneurs, the focus was more on the action-oriented projects such as preparation of business plans (32%), assisted by lectures (26%) and case studies (23%). The results show that the level of the course has a definite influence on the pedagogy used. (It may be noted that the percentages are not adding up to 100, as the same course would be using more than one method. Besides, the courses like PhD and Diploma are conducted in fewer universities, and hence, their percentages are relatively low.)

The level of a programme is closely related to the focus of its content. For example, in an Undergraduate programme one may try to impart knowledge *about* entrepreneurship, whereas in a Postgraduate or Diploma programme, the focus would be on motivating the participants *for* entrepreneurship. It may be noted that researchers have made a distinction between *education about entrepreneurship* and *education for entrepreneurship* (Postigo and Tamborini 2002; Jesselyn Co and Mitchell 2006), which was discussed earlier in this paper. Although most of the teaching methods used in *education about entrepreneurship* and *education for entrepreneurship* are common to each other, there are some differences too. A comparative perspective of these methods (Klandt 1993) is provided in Table 6.

**Table 6** Teaching methods in entrepreneurship courses: The ‘For’ and ‘About’ perspectives (Klandt 1993)

Teaching methods	For	About
Reading books	X	X
Listening to lectures	X	X
Speakers programmes	X	X
Watching videos of entrepreneurs	X	
Practical work	X	
Writing business plan	X	
Computer simulations	X	
Written case studies	X	X
Excursions/company visits	X	X
Role games	X	
Working with entrepreneurs	X	
Preparing papers/theses	X	X
Students’ entrepreneurial club	X	
Workshops for peers	X	X
Consulting services by students		X
Researches		X

Researchers have attempted to develop an overall perspective of the methodologies used in entrepreneurship programmes. A national survey conducted by Solomon (2007) in the USA, covering 270 schools found that the teaching methods most frequently used in entrepreneurship courses/curriculum were the following: (1) case studies; (2) development of business plans; (3) lectures by business owners; (4) discussions; (5) computer simulations; (6) lectures by guest speakers; (7) small business institute (SBI) projects; (8) research projects; (7) feasibility studies; (9) internships; (10) on-site visits to new ventures/small businesses; and (11) in-class exercises. It may be noted that lectures by regular faculty are not a preferred method in entrepreneurship courses.

Since most of the methodological innovations in entrepreneurship education take place in the USA, the above list may be treated as representative of the field. However, there are many other innovative methods that are claimed to be highly effective but are used rather infrequently, which are mentioned in the literature. A few such studies about innovative methods are cited below in the interest of providing the readers a comprehensive view of the scenario. The methods that are most frequently used in teaching entrepreneurship are reading, lectures, group discussions, guest speakers, case studies, on-site visits, research papers, thesis/dissertations and workshops (Klandt 1993; Jesselyn Co and Mitchell 2006). ('Reading' and 'lectures' have emerged as important in the listing by these researchers, probably because of the prevalence of a large number of 'about' type of courses in their sample.) These will have to be supplemented by student-led activities as well as theory-oriented sessions so as to enhance the effectiveness of the learning process (Fiet 2000b). According to Heinonen and Poikkijoki (2006), instructors of entrepreneurship courses should adopt an 'entrepreneurial approach' even in teaching the course, so as to encourage students to broaden their perspectives as well as develop the skills and behavioural competencies required not only for their studies but also for their future entrepreneurial activities.

The more innovative teaching methods used for entrepreneurship education includes business games, especially those using computer simulations (Hindle 2002; Van Clouse 1990); behavioural simulations (Stumpf et al. 1991); making videos and films as well as watching and critiquing them (Verduyn et al. 2009; Klatt 1988); role models or guest speakers (Hegarty 2006); business plan preparation, project works and exercises with symbol cards (Heinonen and Poikkijoki 2006; Heinonen 2007); consultation with practicing entrepreneurs (Klatt 1988; Solomon et al. 1994); poster construction assignments (Hjorth and Johannisson 2007); work-related learning (Dwerryhouse 2001); experiential learning (Kolb 1984; Dhliwayo 2008); action-learning (Smith 2001); active learning (Cooper et al. 2004); entrepreneurial project-based training (Gibb 1999; Solomon 2007); mentorship, incubation and interviews with entrepreneurs (Solomon et al. 1994); discussion of 'live' cases (Gartner and Vesper 1994); teaching through parables (Pio and Haigh 2007); and field trips (Klatt 1988). A few of these more innovative methods are briefly outlined below.

## ***4.1 Pedagogy of Entrepreneurship Education Programmes: Some Innovative Methods***

### **4.1.1 Work-Related Learning**

Work-related learning (Dwerryhouse 2001) is a variant of learning-by-doing and has three stages: (a) from/in practice, (b) from/in research and (c) from/in creating and contributing to a related team or organization. The learning processes involved in these three stages could be described as elaboration, expansion and externalization, respectively. In the elaboration process, the work-related learning improves the work competencies by practice. In the expansion process, the theoretical knowledge and insights are improved by doing additional research on work practices and systems. Finally, in the externalization process, the knowledge developed from practice and research is applied for solving real-life problems, thus externalizing innovations and thereby contributing to the development of the organization as well as the profession (Simons and Ruijters 2001). In the pure form of the learning-by-doing approach, the most important innovations in teaching methods are based on outside-class activities such as internships with start-ups, creating and running small ventures on campus and working on small consulting jobs (Brawer 1997).

### **4.1.2 Experiential Learning**

Experiential learning theory defines learning as ‘the process whereby knowledge is created through the transformation of experience’, so that ‘knowledge results from the combination of grasping and transforming experience’ (Kolb 1984, p. 41). The process involved in experiential learning may be described as learning-by-doing or ‘learning through reflection on what is being done’ and observing what others are doing for getting a real-time experience. It is an integrative process that combines the constructs of previous knowledge, perception, cognition and experience. In other words, the learning happens through cycles of experience, reflection/thought and experimentation. This cycle has four stages in the learning process—concrete experience, reflective observation, abstract conceptualization and active experimentation (see Fig. 5).

In the context of entrepreneurship education, a major contribution of experiential learning is that it serves as the principal means of opportunity recognition, as it helps students to explore their experiences and develop new ideas and experiment with their implementation (Corbett 2005). Besides, it provides theoretical support for many of the practice-oriented methods used in entrepreneurship education such as creating new business models, writing business plans, conducting entrepreneurial audits of established companies, developing marketing interventions, undertaking consulting projects for small firms, performing feasibility analysis for new products and services, working on technology commercialization projects and interviewing entrepreneurs on their experiences with venture creation (Morris and Kuratko 2014).

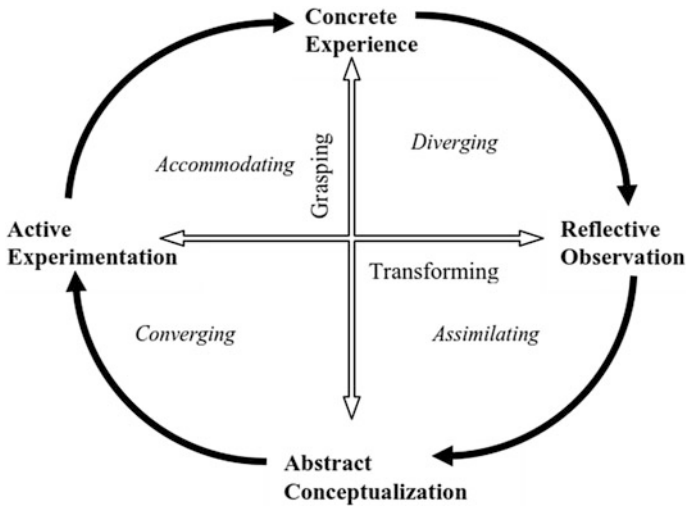


Fig. 5 Kolbe's learning cycle (Kolb 1984)

#### 4.1.3 Action-Learning

The major difference between action-learning and 'experiential-learning' is that the former is based on solving problems, often in groups, whereas the latter revolves around the reflection on any experience, primarily from the perspective of the experiencing/reflecting individual. This is why Stappenbelt (2010, p. 1) defines action-learning as a 'group-based educational strategy that facilitates individual learning through engagement with group members in the solution of current, real and complex problems'. In action-learning, students will play the primary role as problem-solvers, and teachers will act as coaches or facilitators (Hytti and Gorman 2004). Action-learning facilitates the development of autonomous learners when there is a change from a hierarchical to cooperative and eventually a self-directed mode of operation (Stappenbelt 2009; Stappenbelt 2010; Rowland-Jones 2012). A similar view is expressed by Collins et al. (2006), who have shown the impact of a collaborative and synergistic learning approach, especially the action-learning approach, on the development of entrepreneurial skills, through an exercise wherein nascent entrepreneurs (undergraduate students), existing entrepreneurs and entrepreneurship facilitators worked together for solving real-life problems using participatory methods in a peer-learning environment.

#### 4.1.4 Active Learning

Active learning methodology in entrepreneurship education is a pedagogical approach used by institutions to provide a real-time experience to students by

giving them an opportunity to see, touch and feel how entrepreneurs carry out their businesses (Cooper et al. 2004). Students actively participate in this learning process by being with and observing entrepreneurs (Prince 2004). Active experience-based learning approach encourages students to observe and explore entrepreneurial behaviour, especially with respect to the process of overcoming failure. This would also help them to develop more independence from external sources of information and expert advice and to think for themselves. The Hunter Centre for Entrepreneurship at the Strathclyde University used this method for 'implementing entrepreneurship', where students from a broad spectrum of disciplines worked with an entrepreneur on a business development project. Obviously, this was a bold experiment, rare in academic programmes, where students were required to work with an entrepreneur on a specific project on a full-time basis for eight weeks.

#### **4.1.5 Cooperative Learning**

The cooperative learning approach is a group-learning platform where students work with one another in small groups, which helps them in developing generic competencies (Ballantine and Larres 2007). In this approach, the groups must be structured and have coordinated activities to facilitate one another's learning (Johnson and Johnson 1990). The instructor's role in this approach (as in many other innovative teaching methods) is that of a facilitator and is limited mainly to three functions, namely group formation, management and assessment. After identifying the key issue to be addressed by the group, the first step is the group formation. In forming the groups, there are two choices: self-selection by students or intentional group formation guided by the faculty. Intentional groups have an advantage over self-selected groups, as the latter system enables the instructor to provide the diversity required for the groups to generate new ideas and work in innovative ways. Cuseo (1992) recommends that groups in a cooperative learning environment should be formed by the instructor so as to provide diversity in respect of the following characteristics: academic achievement, students' learning styles, personality profiles, ethnic or racial backgrounds, geographical backgrounds, age, class standing, gender, and so on. The ideal size for the group is three or four members (Gillies 2003; Oakley et al. 2004), which will facilitate the participation of all members and enable the instructor to coordinate and control their activities.

Group management is the next step in cooperative learning, where the focus will be on project management, time management, conflict resolution and the development of communication skills required for high-performance teamwork (Oakley et al. 2004). Another important task in group management is the management of meetings, involving the preparation for and attendance at group meetings, making sure everyone understands all the materials and communicating frankly but with respect when conflicts arise (Oakley et al. 2004). Meetings and structured

interactions help participants in developing more openness, social cohesion and group identification (Tuckman and Jensen 1977).

The third step is the assessment, which can be done either based on individual contribution or on group contribution. If the assessment is based on group performance, there is a possibility of a subset of people taking advantage of the group without contributing much to the tasks involved. They are called the free riders or social loafers. Interventions by the instructor, especially for keeping the groups small and interactive, improve the group performance as well as reduce social loafing.

#### **4.1.6 Learning Through Parables**

A novel method of teaching entrepreneurship is the use of parables, which is defined by Pio and Haigh (2007, p. 80) as follows: ‘A parable is a short story about human beings and their behaviour, which has an ethical dimension to it’. The method, as discussed in their paper, adopts the following procedure. Students have to prepare a booklet with two inspirational parables of about 1000–2500 words each under the guidance of a faculty member and submit it within a stipulated time period. The evaluation of the assignment, which has 20–30% weight in the course, is based on the content and analysis of the parable, its references, the design of the booklet and the oral presentation.

#### **4.1.7 Game-Based Learning**

Games are activities involving decision situations and specific outcomes that depend on the choices made. These may be organized as physical activities, role-plays, ICT-based simulations and other similar exercises. Games help the students to develop cognitive and spatial abilities (Mitchell and Savill-Smith 2004) as well as improve their decision-making skills. Balasubramanian and Wilson (2006) found that games could help the participants develop expert behaviours such as pattern recognition, problem-solving, qualitative thinking and principled decision-making.

In their paper on the different methods followed in entrepreneurship education, Heinonen and Poikkijoki (2006) mentions the use of a few games such as *Morning-carpet*, *Symbol cards*, *Aquarium*, and *Building activity*. ‘Morning-carpet’ is a game used for raising awareness about entrepreneurship. ‘Symbol cards’ (Heinonen and Poikkijoki 2006; Heinonen 2007) is a game where students are required to select specific cards or objects from a given set and give a short presentation to the group on the reasons behind their choices. ‘Aquarium’ helps the participants to critically look at and evaluate their own entrepreneurial skills, attributes and behaviour, as applicable to the different roles in entrepreneurship, with special focus on working

in a team. 'Building activity' is an exercise for giving the students an experience of the different roles, skills and behaviours, especially of working in teams, which are required for entrepreneurship.

#### **4.1.8 Problem-Based Learning**

Problem-based learning (PBL) is a method of teaching entrepreneurship by making students discuss and solve a series of real-life problems related to business start-up. An example of how this method is used in practice is described by San Tan and Ng (2006) as implemented in Republic Polytechnic in Singapore. For this exercise, instructors developed role-plays based on real-life situations as identified from newspaper articles, video clips, excerpts from policy documents and company financial reports. This is a powerful pedagogical tool that can enhance the curiosity and analytical capabilities of the students as well as give them a better understanding of the real-life issues associated with new venture creation (White 1996). Problem-based learning has similar characteristics of any interdisciplinary methods of teaching, especially those in the learning-by-doing approach of entrepreneurship education (San Tan and Ng 2006). While the LbD exercises are mostly conducted outside-class, PBL can be conducted within the classroom, where the problems are presented through case studies, role-plays as well as computer simulation, which allows students to develop strategies for solving the problems and apply them to real-life situations (Brawer 1997). PBL enhances critical thinking, cross-functional thinking (transcending the departmental boundaries) and tolerance of ambiguity (Brown 1999; Weaver and Solomon 2003). It is also helpful in developing the desired attitudes to generate appropriate situational responses and strategies to cope with the complex business environment (San Tan and Ng 2006).

#### **4.1.9 Case Method**

Case studies are versatile tools that can be used as part of several methods of teaching, as was seen in a few narratives above. They present a slice of a real-life situation to the students and give them an opportunity to apply their theoretical knowledge to deal with the practical world. They also help in developing academic learning, reflective self-awareness and the experiential learning in a practical context (Binks et al. 2006; Heinonen 2007). Case studies are effective for improving the decision-making skills of potential entrepreneurs (Clark et al. 1984). In a study by McMullan and Boberg (1991) among MBA students and alumni of the University of Calgary, it was found that the case method was effective in developing analytical skills and the ability to synthesize information.



#### **4.1.10 Project Method**

The project method as a pedagogical tool was first used in the eighteenth century in courses such as architecture and engineering and is currently being used in almost all courses including entrepreneurship. It involves the execution of a complete set of interrelated tasks by the students with very little supervision by the faculty. Kilpatrick (1918) who popularized this method as a philosophy of education in the early twentieth century identified four types of projects, namely construction (such as writing a play), enjoyment (such as experiencing a concert), problem (such as discussing a complex social problem like poverty) and specific learning (such as learning the skills of swimming). In an evaluation of the use of this method in entrepreneurship education, McMullan and Boberg (1991) found that it was effective in developing and enhancing the knowledge and understanding of the subject area as well as the ability to evaluate the possible outcomes of various alternatives in decision-making.

One of the ways in which the project method is used in teaching entrepreneurship is to permit the students to choose action-oriented courses and projects as part of their academic programme. An example of this is a course offered by one university, wherein the students form companies or join them as partners with the help of collaborating business incubators. Each student will be part of a company, where they will be fully involved as entrepreneurs in the start-up process, from idea selection and team composition to venture formation and the process of attracting investors. While such involvement would definitely help the students in getting exposure to the real world of entrepreneurship, the scope of conducting such courses is limited because of the limited availability of high-potential ideas as well as the resources required for their implementation. Besides, there can be issues about getting the necessary approvals from the university because of the need for cross-disciplinary arrangements and the non-compatibility of this new pedagogy with the traditional norms of university education.

#### **4.1.11 Business Plan**

The importance of business plan for educating entrepreneurs has been highlighted in many studies (Hills 1988; Hoing and Karlsson 2004; Hoing 2004). Hills (1988) and Johannisson et al. (1998) identified business plan as the most important course feature and the foremost pedagogical tool in many of the entrepreneurship programmes. A business plan, with reference to an existing business, may be defined as a written document that describes the current state and the proposed future of an organization (Hoing 2004). However, in the context of an entrepreneurship education programme, a business plan is an outline of how one would go about starting a new venture. It is a document (of about 20–40 pages), which describes a business idea (a proposed product or service), the assessment of its feasibilities from the technical, marketing, financial as well as HR perspectives, the competitive and environmental constraints associated with it, the financial, people and other

resources required, and the various management activities and strategies to be adopted for launching the venture and leading it to success.

The perceived usefulness and popularity of business plans for entrepreneurship education is so high that most programmes nowadays have business plan competitions as part of their curriculum. Besides, there are independent B-plan competitions being organized by various academic and other support institutions, partly because of the prestige associated with conducting as well as winning in such competitions. The prizes in such competitions are often given in the form of investment or incubation support, which is expected to help in the implementation of the proposed project. While the business plans are used as a major tool for educating the potential entrepreneurs, this is not the only use for it. It is also used by bankers, business angels and venture capitalists for evaluating proposals for funding new ventures.

#### **4.1.12 Role-plays and Simulations**

Role-plays and simulations are both intended to give a vicarious experience of the phenomenon to the participants. Researchers have found them to be quite effective as educational methods (Ratner and Song 2002), especially for preparing the participants for the real world (Shepherd 2004; San Tan and Ng 2006). In role-plays, the students imagine, think and behave as if they were in the protagonists' specific situation (Shepherd 2004). Role-playing encourages people to view situations from new perspectives (Sogunro 2004), especially those of other decision-makers. It gives the students an opportunity for active learning in a low-risk environment (Lehman and Taylor 1994). Role-plays provide a reference point for discussion throughout the course (Brown 1990) and place the discussion in the context of decision-making. Simulation exercises and games too have a similar kind of learning impact on students. Studies focusing on the cognitive learning outcomes of simulations have provided evidence of the development of certain skills, such as spatial and analytical abilities after undergoing simulations and playing business games (Mitchell and Savill-Smith 2004) and the development of expert behaviours such as pattern recognition, problem-solving, qualitative thinking and principled decision-making, as their individual expertise with games and exercises increase (Balasubramanian and Wilson 2006).

#### **4.1.13 Study Visits**

Study visits (also called 'industry visits' because of their focus on business and commerce) are intended to give the students a real-time experience of the business world at close quarters (San Tan and Ng 2006). Experiences of this kind are expected to help students in developing insights for dealing with the specific issues

associated with the creation of their future ventures. Such insights may also be developed from visits of the reverse kind, when entrepreneurs and industry practitioners visit campuses, which are also organized as part of entrepreneurship courses.

#### **4.1.14 Assignments**

Assignments given to students as part of their courses can be of varying nature. The most common among them are term papers or case studies based on primary or secondary data under the guidance of an instructor. While preparing a case-study based on primary data, it will be quite useful for the students to interview entrepreneurs, which will help them to understand the minds of entrepreneurs and how they work. In one of the variants of this exercise, Heinonen (2007) has even permitted his students to write imaginary case studies, which may be classified more as parables than case studies. While such parables may not fully correspond with the reality, they would help the students to enhance their imagination and thinking capabilities and thereby identify innovative ideas which they could use later in the enterprises they would create. The case studies and/or the research papers prepared by the students may be evaluated independently or presented and discussed in the larger group (Heinonen 2007) and then evaluated. The latter method of evaluation would give the students an opportunity to explain and justify their interpretations and proposals as well as apply their acquired theoretical knowledge to the issue being discussed. In general, assignments of this kind (term papers or case studies) will help the students to connect and integrate the processes of academic learning, reflective self-awareness and experiential learning in a practical context (Binks et al. 2006).

#### **4.1.15 Lectures by Role Models**

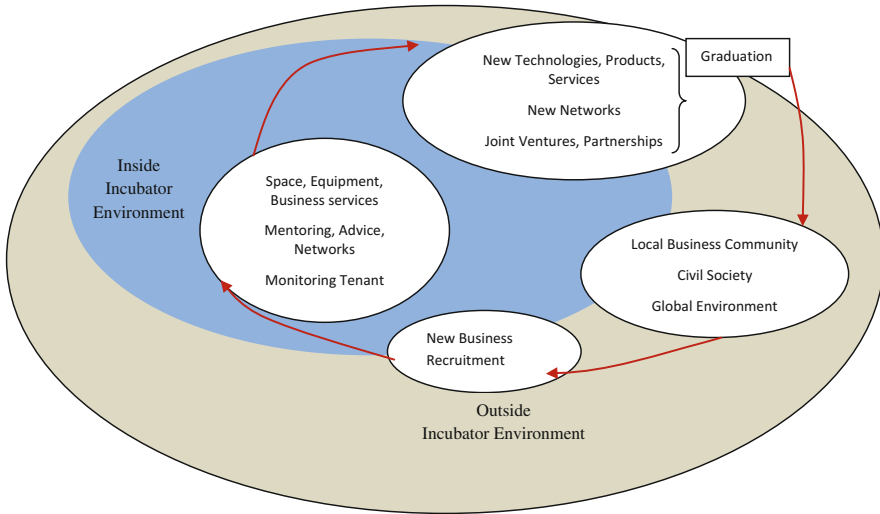
Lectures by role models are found to be an important means of inspiring and stimulating entrepreneurial mindset among students so that they could be persuaded to choose entrepreneurship for a career (Spiteri and Maringe 2014). A role model in this context is an individual who is creative and innovative and has experience in entrepreneurial or intrapreneurial roles, besides having academic knowledge as well as conceptual and communication skills required for motivating and inspiring the student community towards entrepreneurial careers. Student interaction with these role models may be organized not only through lectures but also by ensuring their presence on campuses in various capacities such as 'entrepreneurs-in-residence', coaches, trainers, mentors and advisors (Hills and Welsch 1986; Mitchell and Chesteen 1995).

#### 4.1.16 E-Portfolio Based Pedagogies

The concept of 'E-Portfolio in entrepreneurship' refers to an electronically stored collection (or archive) of students' or entrepreneurs' experiences on entrepreneurship, achievements and artefacts, together with their reflections on the learning derived from them. The simplest form of this pedagogy is to provide a sustainable, scalable and cost-effective means of training and guidance based on the learning need of employed people through online courses, as is done by Intelligent Career Development (i-CD). In this system, i-CD acts as a broker between the university and local employers and appoints consultants to work with employers to identify their performance needs by conducting interviews with them. The consultant identifies the commonalities in the performance needs and discusses them with the subject experts from the university to identify existing validated modules or to design and validate new modules to meet those needs. These modules are then offered as online courses (Felce and Purnell 2012). With the advancement of the Internet-based technologies and the proliferation of MOOC (Massive Open Online Courses), employees and potential entrepreneurs can choose from a variety of MOOC courses without the intermediation of agencies like i-CD. Many are the innovations in teaching entrepreneurship using the materials available on the Internet. An example of this is a course designed by a professor (Dr. T. Prasad) of NITIE (Mumbai, India) relying exclusively on YouTube videos. Based on the themes and issues in entrepreneurship to be taught, the instructor selects the videos on successful entrepreneurs and assigns them to teams of students to play them in class, critique them, comment on them and explain their learning from them. The students' comments are then supplemented by the instructor.

#### 4.1.17 Incubation Support

Business incubation is undoubtedly the most practice-oriented method of training potential entrepreneurs and is hence quite popular among educational institutions, especially those teaching engineering and management subjects. Business incubators (Bøllingtoft and Ulhøi 2005) provide many kinds of facilities and support services such as office space, Internet access, shared equipment, financial resources (venture capital/seed funds), administrative services (Burnett and McMurray 2008), business advice, business monitoring, strategic networking opportunities, business seminars on new venture and start-up-related issues (Hansen et al. 2000), business assistance, access to market, assistance for IP protection and search, access to other global partners and facilitation for economies of scale (Burnett and McMurray 2008). In other words, there are services provided within the incubator and outside. Interactions with the external players while being in the protected/facilitated environment of the incubator would prepare and equip the incubatees to deal with the external environment when required for starting their own businesses. The concept and process of incubation, as represented in Burnett (2009), is reproduced in Fig. 6.



**Fig. 6** Business incubation: concept and process (Burnett 2009, p. 16)

## 4.2 Assessment Strategies

Assessment of the participants and the programme is indeed an integral part of the pedagogical process and hence is discussed in this section. The success of an entrepreneurship programme can be assessed through the impact of that programme on the overall performance of the participants. The commonly adopted assessment tools are tests, examinations, business plans, case studies, projects, term papers, research papers, thesis/dissertation, etc. (Jesselyn Co and Mitchell 2006). Among the many tools of assessment, there is a special role for individual assignments, as they help the evaluator to assess the individual competencies and understanding of the issues, especially highlighting the changes in the pattern of thinking by the individual participant (Maritz et al. 2011; Spiteri and Maringe 2014).

The choice of assessment tools will depend largely on the level of evaluation. According to Duval-Couetil et al. (2010), there are three levels of evaluations commonly adopted for entrepreneurship education: (1) course-level evaluations, measuring student reactions to a particular class or activities within; (2) broader programme-level evaluations, assessing a wider range of outcomes, including interest, knowledge, satisfaction, career choice, venture creation, and economic impact; and (3) construct-level evaluations, measuring changes in specific aspects or constructs related to entrepreneurship. The rigour of the measuring instruments for the different levels has to increase progressively, with the third level needing the most rigorous ones. Some examples of the latter are the psychological instruments for measuring the constructs such as entrepreneurial self-efficacy (Chen et al. 1998;

McGee et al. 2009), entrepreneurial orientation (Covin and Slevin 1989) and entrepreneurial intention (Kolvareid 1996; Collins et al. 2004).

Heinonen and Poikkijoki (2006) in their paper explained a different approach used for evaluating the entrepreneurship programme at their university. It is basically a pre- and post-programme evaluation, where the participants are given a form in which they put in the learning objectives and the expected outcomes at the end of the programme. These forms are given back to the participants at the end of the programme, wherein they are required to enter their assessment of how well the stated objectives have been achieved. This kind of evaluation can increase student commitment (Löbner 2006) towards the course. Additionally, the students are also asked to keep a personal learning diary during the course, which helps them to document what happened during the programme and identify the lessons learned and further actions needed to strengthen them.

Variations in the tools of assessment are also called for according to the level of the participants. The assessment tools for Undergraduate and Diploma students are more of the traditional types such as examinations (61%), tests (57%) and business plans (54%), which are useful in assessing the students' understanding and knowledge of entrepreneurship and related subjects. For the Masters and PhD students, the objective is to develop their critical thinking and to create further knowledge and application thereof, and hence, the assessment criterion is mainly their research capability, which is assessed through research papers and thesis/dissertations (Jesselyn and Mitchell 2006).

In general, the recommendation about the assessment criteria is that one should evaluate the programme/students using multiple criteria rather than just one. Based on a study of the Global Innovation Management programme, Martiz et al. (2014) showed that the assessment criteria used by the programme had multiple criteria, such as the process, outcomes, impact, behaviour of students, innovation intentions, knowledge and skills gained and financial performance including return on investment. For an overall assessment of the impact of the programmes from the practice-perspective, it is also recommended that the students should be made to work on community ventures and be evaluated on their performance with them (McMullan and Long 1987). Similarly, a fully practice-oriented evaluation system is being followed in a programme at NITIE (Mumbai, India), called 'Mandi' (the marketplace), conducted by Dr. T. Prasad, where the students are asked to sell various products at the marketplace and are evaluated on the basis of the money made by them.

Taking an overall perspective on the assessment methods, Duval-Couetil (2013) classified them into four types, namely summative assessment, formative assessment, direct assessment and indirect assessment (see Table 7).

**Table 7** Types of assessment in educational programmes (Duval-Couetil 2013)

<p><i>Summative assessment</i></p> <p>Given periodically to determine what students know and do not know at a particular point in time</p> <ul style="list-style-type: none"> <li>• End-of-chapter quizzes or tests</li> <li>• Midterm or final exams</li> <li>• Grade assigned to final project</li> <li>• University-generated course evaluations</li> </ul>	<p><i>Formative assessment</i></p> <p>Part of the instructional process and provides information needed to adjust teaching and learning in real time</p> <ul style="list-style-type: none"> <li>• Observation</li> <li>• Questioning</li> <li>• Self- and peer assessment</li> <li>• Early or mid-course evaluations</li> </ul>
<p><i>Indirect assessment</i></p> <p>Analysis of reported perceptions about mastery of learning outcomes by students, faculty or others</p> <ul style="list-style-type: none"> <li>• Surveys</li> <li>• Interviews</li> <li>• Focus groups</li> </ul>	<p><i>Direct assessment</i></p> <p>Based on behaviours or products which demonstrate mastery of learning outcomes</p> <ul style="list-style-type: none"> <li>• Standardized tests</li> <li>• Locally developed tests</li> <li>• Assignments and activities</li> <li>• Portfolios</li> </ul>

## 5 Target Groups of Entrepreneurship Education: Innovations in ‘WHOM’ to Teach

As mentioned in the previous sections, the target groups of entrepreneurship education are perhaps the most important factor that influences the content of the courses and the method of teaching. This is because the education requirements and effectiveness would vary according to the learning objectives, styles and skill requirements of the target group (Alberti et al. 2004; Hynes 1996). Vesper (1980) identified different types of entrepreneurs, whose training needs are obviously different: (a) solo self-employed individuals such as brokers, agents, physicians, lawyers and chartered accountants; (b) independent investors who are high-potential business starters (including inventors and innovators); (c) new business starters within existing organizations (intrapreneurs); (d) acquirers, partners, franchisees and investors; (e) developers who build large companies using competent teams built through appropriate hiring and delegation; (f) craftsmen entrepreneurs who create ventures based on their specialized skills; and (g) speculators who create ventures primarily to exploit opportunities for monetary gains. In addition, there is a need for continuing small business education, which is a specialist version of adult continuing education, an informal education system which enables and further develops the skills of SME entrepreneurs by organizing periodic training modules for small business owners and employees, as required (Garavan and O’Cinneide 1994).

While it is generally accepted that the client groups for entrepreneurship programmes could be quite diverse, the extent of such diversity is often a matter of definition and judgment. In a study by Alberti et al. (2004), it was found that the participants for entrepreneurship education programmes came from extremely diverse segments such as leaders and top managers, SME owners and managers, SME advisors, consultants, supporters and trainers, undergraduate and graduate students of

business administration and other disciplines. On the other hand, studies like Gorman et al. (1997) observed that the client groups for entrepreneurship education are limited to students enrolled in the formal education system, out-of-school potential entrepreneurs, existing business owners and a few other special-interest groups. However, combining the findings of several studies, it can be inferred that there is a lot of diversity in the target groups of entrepreneurship education. This may be why Fiet (2000a) identified 116 different topics in entrepreneurship curriculum, which are apparently necessitated by the needs of the diverse client groups involved.

The variations in the target groups of entrepreneurship education are largely based on the purpose for which they join the course, which can broadly be classified into three categories. There are those who want to become entrepreneurs and are working on or having a real and concrete entrepreneurial project. The second group comprises those who want to become academics (teachers, researchers or consultants in the field of entrepreneurship). Thirdly, there are individuals who want to be enterprising in whatever they do, be it in business or non-business fields. A special subgroup of this are the corporate managers who are often encouraged by their companies to do entrepreneurship courses so that they would become intrapreneurs and trainers by acquiring the relevant knowledge and developing their ability to foster innovation, minimize barriers to innovation, train people for entrepreneurial activities and undo their own and others' risk averse attitudes and prejudices (Young 1997; Block and Stumpf 1992; Alberti et al. 2004). When designing and teaching a course, educators have to understand their potential clients and collect information regarding the general psychological characteristics, the background and the social environment of the participants (Bécharde and Gregoire 2005).

In the context of developing countries, there is a greater focus on providing training to individuals who are likely to start ventures or need special help for self-employment than for students and young people in general. Hence, there are more of Entrepreneurship Development Programmes (EDPs) rather than Entrepreneurship Education Programmes (EEPs) in these countries. The target groups for EDPs in India, for example, are as follows: (1) technically qualified young people (mainly the graduates from industrial training institutes and engineering colleges), who have the know-how for organizing manufacturing/service operations but may lack the entrepreneurial skills and attitudes; (2) ex-servicemen, who retire from the services early in life, often with some specialized technical skills and qualities like discipline, initiative and hard work, which are necessary for creating their own ventures; (3) business executives, who have generated innovative ideas for new ventures while working with other businesses and are looking for training and resource support for launching their ventures; and (4) marginalized sections of the society, who need special assistance to develop their skills and competencies as well as to procure the resources needed for starting their ventures or launching their self-employment initiatives. The last group in the Indian context are quite diverse and includes people belonging to the scheduled castes and scheduled tribes, women, artisans, persons with disabilities and/or other employability issues, who are given special training for entrepreneurship and self-employment as well as financial assistance (detailed information on the



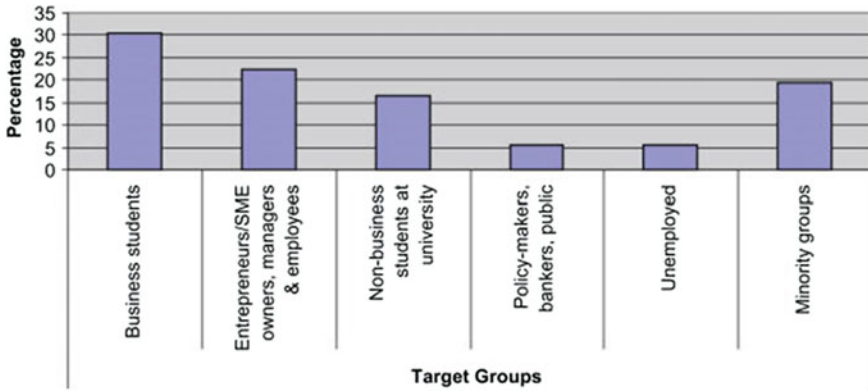


Fig. 7 Target groups of entrepreneurship education programmes (Mwasalwiba 2010)

Entrepreneurship Development Programmes of the Government of India (GOI), including that of the target groups, is available on several GOI sites, especially the following: <http://india.gov.in/information-entrepreneurship-development-programmes>).

The scenario in the developed countries is not very different, as identified by Mwasalwiba (2010) through a review of research literature on the subject (see Fig. 7). The first three groups showed in the figure normally go through the formal education system. Out of these, the largest proportion is constituted by business students followed by entrepreneurs, SME owners and employees, and then the non-business students. The non-formal programmes are targeted primarily at the minorities and unemployed people, followed by the facilitator-groups such as policy-makers, bankers and other sundry groups.

## 6 Positioning of Entrepreneurship Education: Innovations in 'WHERE' to Teach

The issue of 'where' to provide entrepreneurship education/training is intrinsically linked with the choice of the target group. If it is given to students as part of their formal education, it has to be provided mostly at educational institutions, whereas if it is provided to various interest groups outside the formal education system (as identified in the Indian EDP system discussed above), the training is provided by government agencies, training institutions, consultants, trainers, NGOs, banks, etc. An observable pattern in this regard is that developing countries make greater use of the informal system for entrepreneurship training while the developed countries rely more on the formal system for entrepreneurship education. The reason for such a difference is rather obvious. High rates of unemployment is a major problem in developing countries, and the society generally associates education with

employment, with the result that parents and students have a preference for courses that enhance employability rather than entrepreneurial skills. On the part of the policy-makers, the major concern is to provide employment to the less educated and less employable sections of the society, for which they see self-employment as the best solution. Hence, they focus on entrepreneurship training targeted towards the marginalized segments of the society and delivered through the informal system of education with the short-term objective of promoting self-employment.

Developed countries, on the other hand, focus on entrepreneurship education delivered through the formal education system with the long-term objective of sustaining and strengthening the entrepreneurial culture in all walks of the society. For this, it is important that they follow the ‘catch-them-young’ philosophy and start such education from school level and facilitate lifelong learning both through the formal and informal system so as to enable them to find innovative solutions to a variety of problems they might encounter in later life. Under the prevailing system in these countries, entrepreneurship education is offered in high schools as part of the business education programmes, in community colleges (in both regular programmes and extension courses), in the four-year undergraduate programmes and in graduate schools of business (Brown 2000). Researchers have found that the inclusion of entrepreneurship in general education has a strong positive influence on self-employment and the creation of new ventures by the students in their later life (Robinson and Sexton 1994). It is therefore important to identify and evaluate the entrepreneurial potential of the students at the secondary school-level itself (Gasse 1985), with a focus on what Filion (1994) called a ‘pre-entrepreneur’ programme so as to enhance the students’ skills, motivation and willingness to create value for themselves as well as for the society at large.

As pointed out above, the non-formal education in entrepreneurship, which is more common in developing countries, is provided mainly by the government agencies, banks and NGOs. As an example of the government initiatives for entrepreneurship development in developing countries, a few schemes of the Government of India—Ministry of Micro, Small and Medium Industries (M-MSME)—are given below:

1. *National Manufacturing Competitiveness Programme (NMCP) Schemes Under the 11th Plan*, which was initiated in the year 2005 to enhance the manufacturing competitiveness of Indian SMEs in the emerging scenario of liberalization and globalization.
2. *Micro and Small Enterprises Cluster Development Programme (MSE-CDP)*, which was aimed at providing support for the holistic development of selected MSE clusters through value chain and supply chain management based on inter-firm co-operation.
3. *Credit-Linked Capital Subsidy Scheme for Technology Upgradation*, which was launched in the year 2000 and revised in 2005 and provides for subsidizing institutional finance to the extent of 15%, subject to a maximum of INR 10 million, for technology upgradation of SMEs in certain approved sectors.

4. *Credit Guarantee Scheme*, which offers collateral-free loans up to a limit of INR 5 million for individual MSEs.
5. *ISO 9000/ISO 14001 Certification Reimbursement Scheme*, which is an incentive scheme for helping individual SMEs to secure international certification of their quality/environment management systems and involves the reimbursement of up to 75% of the expenses incurred for these, subject to a maximum of INR 75,000/-.
6. *MSME-MDA*, which provides Market Development Assistance (MDA) to SMEs in the form of subsidies of specified proportions/limits of expenses incurred for specified activities such as participation in trade fairs and exhibitions, production of publicity materials, market research, contesting of antidumping cases, using Global Standards (GSI) in bar-coding, and purchase and price preference in Central Government procurements (for 358 specified items).
7. *Micro-Finance Programme*, which is a scheme for refinancing micro-finance organizations through a Portfolio Risk Fund (PRF) created by the Central Government with Small Industries Development Bank of India (SIDBI) to support self-employment activities of people below poverty line (BPL).
8. *National Awards for MSMEs*, which are instituted by the Ministry of MSME to encourage MSME entrepreneurs and promotional agencies and are conferred in four different categories, namely: (a) outstanding efforts in entrepreneurship; (b) research and development efforts; (c) quality in selected products; and (d) entrepreneurship services. Since the first three awards are given separately for the three different size categories, the number of awards is large enough to motivate the different segments.
9. *Trade Related Entrepreneurship Assistance and Development (TREAD) Scheme for Women*, which was introduced during the 9th Plan and revised during the 11th Plan, is intended to support (aspiring) women entrepreneurs with credit/subsidy, training and counselling. Under this scheme, women entrepreneurs are eligible to get investment subsidy up to 30% of their loans, subject to a maximum of INR 3 million. Besides, there is also support for training programmes conducted for women entrepreneurs.

As may be observed, many of the above schemes have training and counselling built into them, and all of them provide opportunities to existing and potential MSME entrepreneurs to get exposure to newer systems and/or launch new initiatives and learn from them. More details on these and other schemes of the Government of India for MSMEs can be had from the following site: <http://msme.gov.in/web/portal/Scheme.aspx>.

It should be pointed out that the governmental assistance schemes for small businesses in developing countries are modelled on those of the developed countries. The Small Business Administration (SBA) of the USA is a much larger system than the Indian Ministry of MSME, with at least one office in each state of the USA and offering services on a variety of issues under more than 20 departments. In addition to operating through its own departments, SBA partners with other agencies to provide mentoring and counselling services to small businesses.

Such agencies include about 900 small business development centres (mostly located at colleges and universities) and more than 100 women's business centres. Besides, they have created a volunteer mentor corps called SCORE (Service Corps of Retired Executives) which has about 350 chapters. Counselling services provided by all these agencies together have coverage of more than 1 million entrepreneurs and small business owners annually. SBA's mission is 'to maintain and strengthen the nation's economy by enabling the establishment and viability of small businesses and by assisting in the economic recovery of communities after disasters', and their services pertain mainly to the '3 Cs' of capital, contracts and counselling. (More information on SBA is available on their site: <https://www.sba.gov/>).

The training programmes offered by the banks are mostly to their borrowers in the context of the loans provided to them. Accordingly, banks engage in business advisory, counselling and consultancy services, which help entrepreneurs to understand the various methods of control systems, measures to be adopted with respect to the proposed lines of business as well as the trends and challenges in the field. Bankers also play a role in disseminating information related to methods of raising capital or reorganization of a company to bring about the desired level of efficiency, besides providing guidance on accounting and tax related matters. Similarly, the interaction with bankers helps entrepreneurs to get more information about the procedures of banks in lending money for enterprises, especially regarding overdraft, medium and long-term loan, debt factoring, bill discounting and asset financing (including commercial mortgage and equity finance). Besides organizing their own programmes, some banks would also arrange for sponsors and support for training programmes. In general, the support of the banks would be of enormous help to entrepreneurs in their financing and networking requirements.

Along with the government agencies and the financial institutions, there are several NGOs that are active in entrepreneurship development, which are more or less equally prevalent in developed as well as developing countries. In fact, many of these NGOs are international in their operations. Their activities are quite diverse and cover a large number of areas such as training for promoting independent economic activities, capacity building for general economic performance and growth, promotion of entrepreneurship and new venture creation, and strategic support for enterprises at the different stages of their growth. Some of these NGOs are formed with the support of the government. One example of this in India is the Federation of Indian Micro and Small and Medium Enterprises (FISME), which was originally started in 1967 as the National Alliance of Young Entrepreneurs (NAYE) and later (in 1995 in the aftermath of economic liberalization in India) got converted into FISME by federating the state-level associations (with a current membership of 22 SME bodies from 18 states), and is a member of the National MSME Board formed under the MSME Act 2006. FISME conducts regular events across India catering to the different needs of SMEs and also acts as an outreach and advocacy forum for MSMEs in India. It is consulted by SME policy-makers of the country and works in close coordination with the Ministry of

Micro, Small & Medium Enterprises as well as major multilateral and bilateral bodies such as UNIDO, ILO, UNCTAD, DFID and GTZ. Corresponding to FISME, which operates mainly at the national level, there is an international association for SMEs operating at the international level with advocacy, networking and skill development programmes, namely the World Assembly of Small and Medium Enterprises (WASME), which was launched in 1980 at an international conference of SMEs from several countries, held at New Delhi, and later renamed as the World Association for Small and Medium Enterprises (WASME).

In addition to the above-mentioned NGOs operating on a wide canvas and dealing with a variety of issues, there are others that operate with specific focus areas and often limited geographical coverage. Some examples of such NGOs in the Indian context are as follows: the National Entrepreneurship Network (NEN) initiated by the Wadhvani Foundation with a mission to create and support high growth entrepreneurs, driving entrepreneurship as a catalyst for job creation and economic growth in India; Udyogini, which has a mission of helping poor women in remote and backward areas of India to build micro-enterprises and become entrepreneurs as well as of training the trainers especially for NGOs in India and other developing countries through their collaborative initiative with Intel Corporation, namely Intel-Udyogini School of Entrepreneurship (I-USE); Calcutta Youth Self-Employment Centre, with a mission of conducting various skill training programmes and business management programmes for promoting gainful employment and self-employment for the unemployed youth as well as other activities relating to skill training, management development and entrepreneurship development; SEWA (Self-Employed Women's Association), which was registered in Ahmedabad in 1972 as a trade union of poor unorganized women workers or small business owners and has a mission to provide full employment to poor women labourers in terms of work security, income security, food security and social security (at least for health care, child care and shelter) through the strategy of 'struggle and development' for overcoming their constraints and building their capabilities while adhering strictly to the Gandhian principles of *Satya* (truth), *Ahimsa* (non-violence), *Sarvadharm* (integrating all faiths, all people) and *Khadi* (propagation of local employment and self-reliance through locally developed technologies); AWAKE (Association of Women Entrepreneurs of Karnataka), which was launched in 1983 with a unique approach of 'Entrepreneur guiding Entrepreneur' through voluntary efforts of successful women entrepreneurs to support other aspiring women by counselling, training, business incubation, mentoring and peer group partnerships; RUDSETIs (Rural Development and Self-Employment Training Institutes), the first of which was set up in Karnataka in 1982 jointly by Sri Dharmasthala Manjunatheshwara Educational Trust, Syndicate Bank and Canara Bank, under the leadership of Dr. Veerendra Heggade, Dharmadhikari (Spiritual Head) of Dharmasthala and are currently operating from more than 25 locations in India for providing training to promote rural development through self-employment.

NGOs' involvement in entrepreneurship development in the informal sector is not confined to the developing countries. In fact, they are relevant for any country,

irrespective of its stage of development, as there will be people of special developmental needs in any country. Examples of such special-focus NGOs from two different countries are given below to illustrate this point. The Mowgli Foundation in Dubai is a not-for-profit organization with a mission to provide entrepreneurship mentors, who would inspire, support and empower entrepreneurs in achieving their business and personal potential, with a view to promoting sustainable job creation as well as social and economic development. The foundation's main activity is to recruit, screen and train mentors and entrepreneurs; connect them to each other for a one-to-one relationship based on the entrepreneur's requirements and the mentor's expertise; guide them to enter into a mentoring contract; and support them for a year-long mentoring relationship.

The second example is a 'network-based NGO' from the USA, where the activity is pitched at a lower level of school dropouts and the 'at-risk youth from low-income backgrounds' and extends beyond mentoring to the actual teaching of entrepreneurship. The Network for Teaching Entrepreneurship (NFTE) was founded in 1987 by Steve Mariotti, who has had a difficult childhood because of dyslexia, which he has successfully overcome through persistence and hard work, eventually to build a career as a serial entrepreneur (operating seven businesses by the age of 21!) and a corporate executive, but had suddenly changed his career-track to be a champion of entrepreneurship development among the 'at-risk youth' after he got mugged by three unemployed teenagers, who he thought could make much more money through entrepreneurial activities than through antisocial activities.

Considering how he could convert his own learning difficulties during his childhood and adolescence into certain advantages, Mariotti decided to focus on the development of youth, for which he adopted a different strategy of offering a business programme in a vocational high school, where the teaching was based on a broader perspective, transcending the immediate concerns of starting and running a business but aiming at developing the full potential of the individual, focusing on the development of character and self-esteem and behaviour based on the Golden Rule (ethics of reciprocity: 'Do unto others as you would have them do unto you'), in addition to imparting the basic knowledge and skills in the use of language (reading and writing) and mathematics. The overall development of the individuals, with special focus on their unique potential, has made these youngsters more enterprising, with the result that the business formation rate among NFTE's 300,000 graduates was more than 6%, which was much higher than the US national average for schools. Currently, the NFTE programme enrolls about 60,000 students per year in 22 states of the USA as well as in 12 other countries.

According to Mariotti, the 'unique capability development' model applies also to his own work as a teacher and mentor of entrepreneurs. He claims that dyslexic individuals are able to think non-sequentially and see the bigger picture, which is what markets are all about. He could therefore see the new markets emerging for different products and services, understand their dynamics and teach his students about them. The significance of the NFTE model has been recognized internationally, and Mariotti has been an invited speaker for several international events on

developmental issues, including at the World Economic Forum (WEF). The 30-odd books and workbooks authored/co-authored by him are sold and/or are freely distributed among young people in many parts of the world. The most seminal among these books is *The Young Entrepreneur's Guide to Starting and Running a Small Business*, which has become a standard for entrepreneurship development and is used in many countries including China and the Middle East. (More details on Steve Mariotti and NFTE are available on the NFTE website: <http://nfte.com> and the several case studies written on them, including one by Mariotti's alma mater, the Harvard University.) It is obvious that NGOs are relevant in all countries, as they focus on the development and empowerment of the marginalized segments of the society through education and training, so as to make them more enterprising and put them in touch with a network of professional and financial resources required for starting their own ventures.

## 7 Conclusion

Entrepreneurship education programmes are understood and implemented in a multitude of perspectives ranging from the development of enterprising behaviour to the nitty-gritties of starting and managing a venture/self-employment project. Such diversity in perspectives, client groups and their developmental requirements has led to a large number of innovations in the contents, methodology, target groups and institutional arrangements in the conduct of entrepreneurship education. This paper has attempted to document the more prominent ones among these innovations and organize them under the 'WHAT-HOW-WHO-WHERE' framework proposed by WEF (2009). While the materials in this paper are organized according to the four categories of the above framework, it should be pointed out that the categories have interdependence among one another and therefore influence one another. Based on the fairly comprehensive review of the research literature and practices in the field, it is possible to summarize the findings into a few generalizable statements or propositions.

- Though the researchers in general have a tendency to look primarily at the contents and pedagogical techniques of the educational programme (as is also prioritized in the WEF model), the influence process is actually in the reverse order. As in any business, it is the market (the client groups) that influences the nature of products and services to be offered as well as the providers and channels of such products and services. While the felt need of the client groups is the most critical factor in launching a product or service, the clients may not always be able to articulate their dormant needs, which is especially true of innovative products and of educational programmes in particular. Since education is about developing the individual, the benefits of such development are often realized by the concerned individuals only after the development in most cases. This is why, in respect of educational programmes, the articulation of the

need often comes from the experts/enlightened sections of the society or the relevant institutions, particularly from the vision, mission and objectives of the latter. In general, it could be stated that the initiative for a programme may arise from the institutional vision and/or the interaction between the client groups and the institutions, which would then lead to the development of contents and methodologies based on the requirements of the client groups and the competencies and expertise available with the institution.

- The target group for entrepreneurship programmes can be of two broad categories, one a general-interest group (comprising students, employees especially those from the corporate sector, policy-makers, bankers, consultants and facilitators), and the other a special-interest group (comprising the potential or aspiring entrepreneurs). The first group will need courses *about* entrepreneurship (which may also be called ‘enterprise education’) whereas the second group will need courses *for* entrepreneurship (which is the proper domain of ‘entrepreneurship education’).
- ‘Enterprise education’ is normally conducted at formal educational institutions, as their focus is on ‘degree-awarding’ programmes, which have to be broader in scope and open to all eligible applicants who have completed a certain level of educational attainments. Although the formal educational institutions may also do a few action-oriented training programmes for specific groups, these are normally taken up by the providers of non-formal education, such as government agencies, training and consultancy organizations, NGOs and bankers.
- The contents of the programme, as mentioned above, will have to be tailor-made for the requirements of the client groups, and hence, it is natural to have a lot of diversity in the contents to accommodate the variety of client groups that get enrolled for an entrepreneurship programme. In general, the contents of entrepreneurship programmes can be classified into two broad categories based on the specific area of their focus: (1) *Person-focused* [comprising mainly the development of human capital assets related to enterprising behaviour (Volery et al. 2013) such as entrepreneurial traits (e.g. self-efficacy, autonomy, independence, risk propensity and innovation propensity), motives (like achievement, power and excellence), knowledge (of technology, languages, maths and science, general environment, etc.), belief systems that support entrepreneurial activity (e.g. the perceived desirability and feasibility of one’s plans and actions), skills, competencies and behaviours]; and (2) *Project-focused* [comprising mainly the topics identified by scholars like Bygrave (1994) and Kirby (2004): entrepreneurial process, opportunity recognition, entry strategies, market opportunities and marketing, creating a successful business plan, financial projections, venture capital, debt and other forms of financing, external assistance for start-ups and small business, legal and tax issues, intellectual property, franchising, harvesting and entrepreneurship economics]. While most programmes attempt to combine these two types of content, their relative importance would vary across programmes. In general, one can say that there will be greater dominance of the *person-focused* content in ‘enterprise education’



programmes, and the *project-focused* content in ‘entrepreneurship education’ programmes.

- Based on a horse-jockey analogy (where the contributions of both the horse and the jockey are equally important for winning a race), in creating a ‘winning enterprise’ the person and the project are equally important. However, in the context of entrepreneurship, one could argue that the person and his/her attitudes, skills and competencies are more critical than the features of the project, as the project is created and periodically modified or even replaced by the person, unlike in the case of horse and jockey (where the jockey does not create the horse but only trains it). If the extraordinary success achieved by the likes of Steve Mariotti (of NFTE) with his ‘Unique Capability Development’ model is any indication, it would not be unreasonable to assert that the development of the person should be the more critical part of entrepreneurship education.
- Among the four anchors WHAT-HOW-WHO-WHERE of the framework discussed in this paper, the maximum number of innovations is reported in the ‘HOW’ part (that is, in the pedagogy part). While there are many kinds of pedagogies reported in this section, a careful examination of them would show that most of them would fall under the same paradigm of ‘LbD’ (learning-by-doing) which, in the epistemological terminology, may be described as the subjectivist or constructivist paradigm. This is a paradigm which believes that knowledge and truth are a matter of interpretation and are created, not discovered, and is in sharp contrast with the objectivist (or empiricist) paradigm which believes that knowledge exists outside the knower (independent of the knower’s interest and awareness) and has to be discovered (Pratt 1998). The traditional methodologies of teaching entrepreneurship (where the student’s role is to listen to and discuss with the experts and read and understand the objective/empirically tested truths being presented in research papers) is in the objectivist paradigm. The emerging trend in entrepreneurship teaching is the increasing use of the subjectivist (constructivist) paradigm of creating one’s own reality through a process of learning-by-doing (LbD). The underlying reason for this kind of a trend is the growing realization of the importance of actions and action-orientation in the entrepreneurial process.
- While evaluating the effectiveness of entrepreneurship programmes, there is often a danger of drawing positive conclusions too soon because of the self-service bias on the part of trainers and educators. The impact of this bias will be aggravated by the self-selection bias on the part of the participants. In other words, if the participants have the attitudes and interests for entrepreneurship and that is the reason why they join the programme, the difference made by the programme can be tested only by having a control group of similar entrepreneurially inclined persons who have not gone through the programme. Obviously, it would be difficult to find such a group and compare their performance with that of the ‘educated’ group, and hence, most of the evaluations will be done as independent assessment of post-programme reactions or test of knowledge. Even when the performance is evaluated, the inferences may not be very reliable in the absence of an appropriate control

group. Notwithstanding this, one cannot belittle the role of education in bringing out the full potential of a person, even in the etymological sense of the word, that is, developing or ‘pulling out’ what is already contained in the individual. The unique features of the individuals’ personality, especially with respect to their entrepreneurial orientations and learning requirements as well as style preferences, have naturally led to the emergence of such diversities in the contents and methodologies of entrepreneurship education.

- The overall picture that emerges about entrepreneurship education is that there are two main objectives for it, one to develop entrepreneurial traits, motives, attitudes and competencies of individuals (which may also be called ‘enterprise education’), and the other to help the individuals with the specifics of creating a new venture (which may be called ‘entrepreneurship education’ in a restricted sense of the term). Since the formation of the individuals happens largely during the early years of their lives, it is the early-stage education (along with other factors such as sociocultural norms, family socialization, economic/legal-political environment, which can collectively be called the *general environment*) that can make a contribution towards the development of the entrepreneurial individuals in the society. Given that there is an adequate supply of entrepreneurial individuals in the society, the facilitation of the *task environment* by governments, NGOs, universities and technical/R&D institutions, financial institutions as well as industrial and commercial organizations would accelerate new venture creation. Education, therefore, has a dual role in promoting entrepreneurship, one (as part of the general environment) in the formation of the entrepreneurial individual and the other (as part of the task environment) in channelizing these entrepreneurial individuals into business activities with a special focus on new venture creation. Alternatively, if the early stage education is not conducive for developing entrepreneurial traits, motives and attitudes, the training and other facilitations provided at a later stage may not be of much help. Hence it is important to deal with entrepreneurship education as an integral part of general education and not in isolation.

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**Part II**  
**Experiments with Curriculum**

# Chapter 2

## Entrepreneurial Management Education: An Alleyway for Sustainable Economic Growth of North-East India

Subrata Debnath

**Abstract** The economic power of entrepreneurial activity is globally accepted over the period of time. Argument continues on the issue whether entrepreneurs are born or they can be made also. Although different studies reveal that the entrepreneurial skills can be developed and improved, the statistical facts and figures of several other research works divulge that the prevailing entrepreneurial education and training programmes are virtually failing to achieve the desired goal as far as producing quality entrepreneurs in good numbers is concerned, especially in the emerging economies like India. Against this backdrop, the present paper advocates a model for implementation of Entrepreneurial Management Education in the north-east India through two course curriculums: one, a 32-Credits-based PG Programme, may be called as ‘Major’, and the other may be called as ‘Minor’, a 16-Credits-based Diploma Programme. The Major programme is designed for the development of Entrepreneurs, and the Minor programme is designed for the development of Intrapreneurs. This model of Entrepreneurial Management Education can easily be replicated for rest of the country in particular and the other parts of the globe in general through tailor-made approach.

**Keywords** Sustainable economic growth • Entrepreneurial management (EM) • EM Major course curriculum • EM Minor course curriculum • North-east India

### 1 Introduction

Entrepreneurship is an old but still a living means for innovative practice to achieve the economic growth and prosperity. ‘*Entrepreneur*’ is basically a French term. It was first introduced to the economic literature in the eighteenth century by an Irish–French

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economist, (Cantillon 1939) to eloquent a person bearing risks in a business is different from one supplying business capital. Since then, different management philosophers like Say (1803), Walker (1876), Schumpeter (1939), McClelland (1961), Drucker (1964), Vesper (1980), Pinchot (1983), Shapero (1985), Hisrich (1986) have observed an entrepreneur through different lenses. But none of the above had forgotten to give emphasis to the economic value of the term directly or indirectly. Thus, it is the fiscal value of the term that keeps it alive throughout the globe century after century till date and hopefully the same trend will continue in the coming centuries too.

However, the management guru Drucker (1985) conceptualized entrepreneurship as a practice of systematic and purposeful innovation which can be managed like other business functions. In his view, innovation is nothing but the application of knowledge and information to human activity to develop a value-based product or service. Entrepreneurial success comes from a methodical analysis, and logical pursuits of opportunities arrived at right response and shaping the functional inspiration and commitment to systematic practice. But the journey to become a successful entrepreneur is not a bed of roses because it always bears some risk and uncertainty. As such, it requires to be managed systematically. Thus, the role of management in entrepreneurship emerged with the development of the term '*Entrepreneurial Management*' (EM) which has become a buzzword in today's business world. Different management philosophers conceptualized entrepreneurial management from different standpoints. Some opined it as a style of management, while others viewed it as a process that gives birth of new enterprise through innovative approaches to address the unsatisfied demand of the present and potential market. However, the present paper being a conceptual paper in nature contributes to the existing literature on EM in a new way, giving the supposition that it is the time to introspect EM as a complete discipline of study within the purview of formal education system of north-east India. On the basis of review of the existing literature on Entrepreneurial Management and seeing the multiplicity of untapped natural and human resources of north-east India, this paper developed a model design for *Entrepreneurial Management Education* which will be particularly suitable for north-east India. According to the proposed model, entrepreneurial management education may be introduced in the north-east India through two course curriculums, one may be called as **Major** (*a 32-Credits-based PG Programme*) and the other may be called as **Minor** (*a 16-Credits-based Diploma Programme*). In this paper, the designs of both the curriculums have been illustrated in detail for implementation in the said region for sustainable economic development. Sustainable development means a growth or improvement which will not be stopped with the passage of time; rather, it will continue towards further escalation. While reviewing the existing literature on prevailing entrepreneurial education and training, it reveals that these are virtually failing to achieve the desired goal as far as producing quality entrepreneurs in good numbers is concerned, especially in the emerging economies like India. In a study, the success rate of Entrepreneurship Development Programmes in north-eastern states in terms of number of units set up is found 25.2%. But there is a wide variation in state-wise rate of success. The highest rate of success of 37.7% is found in Manipur, followed by 30.5% in Assam,

29.5% in Meghalaya, 23% in Arunachal Pradesh, 17% in Mizoram, 14.2% in Nagaland, and 13.2% in Tripura (Mali and Dutta 2000). In yet another study on motivational efficiency of Entrepreneurship Development Programmes ( $\eta_{EDP}$ ) conducted by the Debnath (2012), it is found that the  $\eta_{EDP}$  of six service providing institutions viz. Swavalamban Training Institute (STI), Entrepreneurship Development Institute of Tripura (EDIT), Indian Institute of Entrepreneurship (IIE), Micro, Small and Medium Enterprises Development Institute (MSME-DI) [formerly, *Small Industries Service Institute (SISI)*], North-Eastern Industrial Consultants Limited (NECON), and N. B. Institute for Rural Technology (NBIRT) are varying between 6.98% and 12.79% which is the focal reason behind the low success rate (only 18.89%) of Entrepreneurship Development Programmes in Tripura. Against this backdrop, the present paper will be a hope for the success of education in entrepreneurship in the coming days, especially in the globalized regime. Although the proposed model for entrepreneurial management education has been designed considering the unique characteristics of cultural diversity, topographic assortment, multiplicity of untapped natural and human resources, etc. of north-east India that are quite different in comparison with the other parts of the country, the same may be replicated for rest of the country in particular and the world in general through tailor-made approach. However, before considering the EM as a discipline of study, let us see how others viewed it as a style of management or process of management.

## 2 Entrepreneurial Management as a Managerial Style

In view of Stevenson (1983), entrepreneurship is nothing but a managerial behaviour that always seeks opportunities to add value to both the organization and society. He opined that such managerial behaviour is completely different from administrative managerial style as proposed by Mintzberg (1973) or Khandwalla (1977). The basic difference between the Administrative Managerial Style (AMS) and Entrepreneurial Managerial Style (EMS) is that in AMS emphasis is given on the most efficient use of existing resources, while in EMS business opportunities are explored irrespective of the resources that are presently being controlled. However, the other distinctions between these two styles of management are as follows:

1. In EMS, strategies are controlled by perceived opportunities in the present and potential market, but in AMS, strategies are governed by available resources.
2. Commitment to opportunities in the case of EMS is revolutionary with short duration, but in the case of AMS, it is evolutionary with long duration.
3. Commitment of resources is many stages with minimal exposure at every stage in EMS, but it is a single stage with complete commitment out of decision in AMS.
4. In EMS, control over resources is generally through outsourcing of resources, but in the case of AMS, it is through ownership.

5. Management structure in AMS is hierarchy based, but in EMS, it is flat and creates lots of informal organizations.
6. AMS advocates reward through seniority, whereas EMS supports reward on the basis of value creation.
7. AMS generally results slow but steady growth. Alternatively, EMS is usually results rapid growth, but there always some risk components.
8. Entrepreneurial managerial culture always promotes search for new opportunities, but in AMS there is hardly any scope for searching of new opportunities. Moreover, in case of failure, AMS advocates punishment to the defaulter.

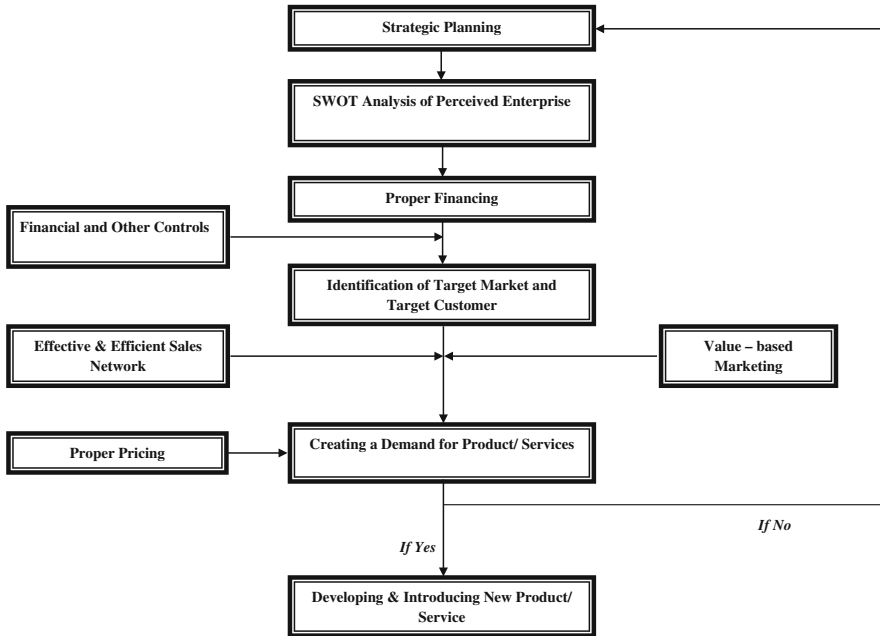
So, the above discussion transpires that *Stevenson* illustrated the term Entrepreneurial Management as a style of management in contrast to the conventional administrative managerial style. Well, let us see EM through another lens to advocate EM as a process of management that gives birth of new enterprises to meet the societal demand.

### 3 Entrepreneurial Management as a Process of Management

In view of Calvin (2004), setting up a business is the easiest way to pull off the command on one's professional life. He believes that *Entrepreneurial Management* offers widespread awareness, in the form of both knowledge and skills about the various facets that are inevitable to start-up a business venture. In fact, EM facilitates to materialize the potential entrepreneur's vision through establishing successful business stratagem. On the basis of analytical insight into various real-world case studies on both successful and unsuccessful business start-pus, Calvin (2004) conceptualized EM as a process that gives birth of a new product or service in the demanding market and the whole process completes in the following ten steps.

1. Preparation of a strategic plan based on the present or potential market,
2. Strengths–Weaknesses–Opportunities–Threats (SWOT) analysis of the perceived new enterprise,
3. Evaluation of all possible sources of financing,
4. Techniques of financial and non-financial controls,
5. Detection of target customers,
6. Value-based marketing to reach the target customers,
7. Developing a effective and efficient sales organization,
8. Inexpensively creating a demand for product and services,
9. Proper pricing,
10. Buying an existing business or developing and introducing new product(s)/ service(s).

In view of the above discussion, *Entrepreneurial Management*, from Calvin's (2004) stand point, may be defined as a process that gives birth of new enterprise



**Fig. 1** Process of entrepreneurial management [designed by the author based on the contribution of Calvin (2004)]

through innovative approach to addressing the unsatisfied demand of present and potential market. This process of EM may be well understood with the help of a simple block diagram (Fig. 1). The unique feature of this interpretation is that it tells about the sustainability of any product or service. Even if any product or service initially attracted the target customers, it may lose its position after certain point of time due to emergence new competitor in the market or change in the taste of customers and then the existing product/service will be failed to create its demand in the market. As such, entrepreneur will be bound to rethink about his strategic planning and ultimately this will lead to the reengineering of the business or business diversification following an innovative approach of EM.

#### 4 Entrepreneurial Management as a Discipline of Study

With a view to establishing a successful business enterprise, the role of relevant knowledge and experience cannot be ignored. In the context of the present paper, EM shows how to systematically leverage such knowledge. The traditional management education like MBA in Financial management, MBA in Marketing management, MBA in Human Resource management actually focuses on the operational side of a business entity and no way these are helpful for starting a new



business or diversifying an existing business through intrapreneurship. Thus, the role of Entrepreneurship in Management education emerged or in other words, entrepreneurial management as a discipline of study may fill the existing gap in management education. Today's highly competitive global business environment is demanding for genetically new breed managers who can handle these challenges through tailor-made approaches and not only lead the organizations for survival but also help them to thrive. This is the opportunity that attracted the author to conceptualize EM as a complete discipline of study within the purview of formal educational system. The Epsom College in the USA and EM Lyon Business School in France are two well-known examples, which have programmes tailored specifically for entrepreneurs, which have been successful. Similar initiatives have already been taken by the Wharton Management Department, University of Pennsylvania, and Carlson School of Management, University of Minnesota, and the results of their initiatives are upbeat. EM education needs to concentrate more on development of achievement motivation along with other relevant issues. The proposed model of EM education will give emphasis not only on knowledge development but also on skill development. Theoretical papers will help the students in developing their knowledge level, and practical works in the existing enterprise of successful entrepreneurs will increase their skills. In EM education, always there need to be a close linkup with the established entrepreneurs who may come and share their success and failure stories with the students to make them familiar with the hurdles and challenges of entrepreneurship and the proven way to come out from such stumbling blocks. This will help the budding entrepreneurs in maintaining a positive nexus with the practical world and visualize their glorious future in entrepreneurial venturing. Virtually, established entrepreneurs will become the Role Model before the budding entrepreneurs. After successful completion of such a course curriculum, a candidate must have enough knowledge on market opportunities and threats along with desired knowledge and skill which virtually inspire an educated youth to embrace entrepreneurship as career by choice. A model for EM education as discussed above is illustrated below with the help of block diagram (Fig. 2).

The above theoretical model of Entrepreneurial Management Education may come into force through two course curriculums—*Major* and *Minor* covering different focus areas such as developing strategy for success, nurturing creativity, promoting innovation, sourcing finance, entrepreneurial leadership.

The *Major* curriculum may be a part of formal education system. It will be a PG-level course like that of existing MBA programme. Students for this programme should come after successful completion of graduation in any discipline and through a *Psychological Test on Entrepreneurial Potential* instead of CAT, MAT as applicable in the case of traditional MBA programme. To establish Entrepreneurial Management Education as a complete discipline of study, initially academic institutions should not look for the quantity of the candidates attracted for the course rather they should concentrate on quality of the candidates paying attention for the course. It is always better to reduce the intake capacity initially and nurture them properly to establish as successful entrepreneur. It will help to

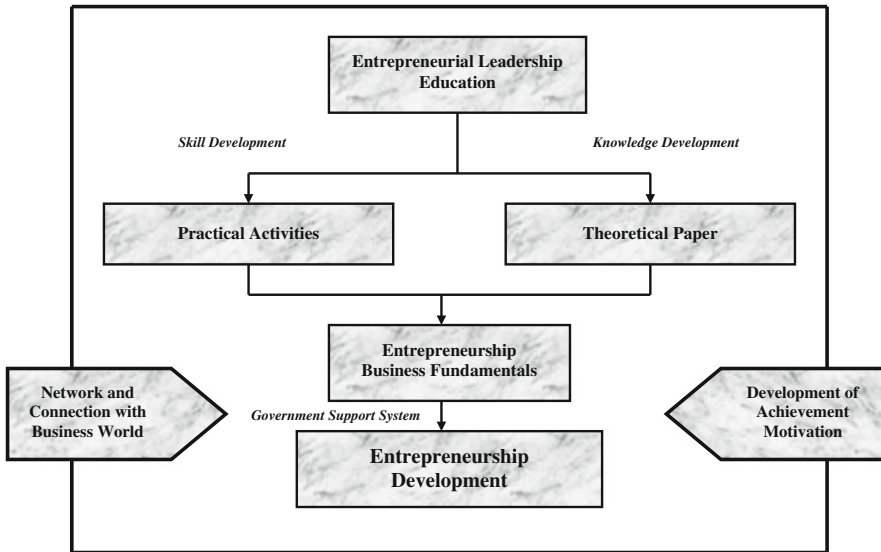


Fig. 2 Model for entrepreneurial management education (designed and developed by the author)

ascertain an entrepreneurial culture in the region and country as a whole. Since the candidates are joining in the Major curriculum after attaining a certain level of higher education, there is every possibility that this course will also give birth of hi-tech hi-touch entrepreneurs along with general entrepreneurs.

Entrepreneurial Management Education as a *Minor* curriculum may be effective for reasonably less educated but established small entrepreneurs who want to survive and thrive in the rapidly changing business environment and fierce competition in the global market. It may be a Diploma-level course. Successful completion of Matriculation examination may be considered as the basic academic qualification for admission to such a course. However, the established small entrepreneur having required basic academic qualification may be given preference for admission to the *Minor* curriculum. In Indian context, this course is going to be very crucial one as the Government of India is interested to reform the small-scale sector through more disinvestment. As such, Indian small entrepreneurs are going to face huge competition in the domestic market. Under the changed circumstances, EM education as a *Minor* curriculum for existing entrepreneurs will play a pivotal role to cope with upcoming stern competition, survive in the market and even flourish overcoming all odds (Table 1).

Entrepreneurial Management Education in the form of Major or Minor will be suitable for the persons who are dreaming to become an entrepreneur or intrapreneur. As such, the course curriculum of such programmes required to be designed in such a way that includes fundamentals of business start-ups along with application and operational issues of business, probable hindrances in running the business, and the techniques for overcoming such challenges. In fact, the core motto

**Table 1** State-wise annual growth in normal GDP for the period from 2001–2002 to 2014–2015

State/union territory	2001–02 in Rs. Crore	2002–03 in Rs. Crore	2003–04 in Rs. Crore	2004–05 in Rs. Crore	2005–06 in Rs. Crore	2006–07 in Rs. Crore	2007–08 in Rs. Crore	2008–09 in Rs. Crore	2009–10 in Rs. Crore	2010–11 in Rs. Crore	2011–12 in Rs. Crore	2012–13 in Rs. Crore	2013–14 in Rs. Crore	2014–15 in Rs. Crore
India	2,097,726	2,261,415	2,538,170	2,971,464	3,390,503	3,953,276	4,582,086	5,303,567	6,108,903	7,248,860	8,391,691	9,388,876	10,472,807	520,030
Andhra Pradesh	156,711	167,096	190,017	224,713	255,941	301,035	364,813	426,765	476,835	583,762	662,592	754,409	857,364	
Assam	2,104	2,071	2,368	3,488	3,755	4,108	4,810	5,687	7,474	9,013	10,619	12,091	13,382	15,588
Bihar	38,313	43,407	47,305	53,398	59,385	64,692	71,076	81,074	95,975	112,688	125,820	141,621	162,652	183,798
Chhattisgarh	57,657	64,965	66,174	77,781	82,490	100,737	113,680	142,279	162,923	204,289	247,318	313,995	368,337	402,283
Goa	29,539	32,493	38,802	47,862	53,381	66,875	80,255	96,972	99,364	119,420	132,872	153,621	175,961	210,192
Gujarat	7,097	8,100	9,301	12,713	14,327	16,523	19,565	25,414	29,126	33,605	36,025	34,965	48,897	
Haryana	123,573	141,534	168,080	203,373	244,736	283,693	329,285	367,912	431,262	521,519	594,563	670,016	765,638	
Himachal Pradesh	65,505	72,528	82,862	95,795	108,885	128,732	151,596	182,522	223,600	260,621	301,959	345,238	392,894	435,310
Jammu & Kashmir	17,148	18,905	20,721	24,077	27,127	30,274	33,963	41,483	48,189	57,452	64,957	73,710	82,585	
Kashmir	18,039	20,326	22,194	27,305	29,920	33,230	37,099	42,315	48,385	58,073	65,759	75,574	87,319	87,921
Jharkhand	35,069	37,967	42,449	59,758	60,901	66,935	83,950	87,794	100,621	127,281	143,891	164,876	189,208	198,514
Karnataka	112,847	120,889	130,990	166,747	195,904	227,237	270,629	310,312	337,559	410,703	455,212	522,673	614,607	702,131
Kerala	77,924	86,895	96,698	119,264	136,842	153,758	175,141	202,783	231,999	263,773	307,906	349,338	396,282	
Madhya Pradesh	86,745	86,832	102,839	112,927	124,276	144,577	161,479	197,276	227,984	263,396	311,670	372,171	450,900	508,006
Maharashtra	273,188	299,479	340,600	415,480	486,766	584,498	684,817	753,969	855,751	1,035,086	1,199,548	1,372,644	1,476,233	1,686,695
Manipur	3,369	3,506	3,979	5,133	5,718	6,137	6,783	7,399	8,254	9,137	10,504	11,983	14,324	
Meghalaya	4,478	4,763	5,280	6,559	7,265	8,625	9,735	11,617	12,709	14,583	16,412	18,135	20,808	25,333
Mizoram	1,947	2,166	2,325	2,682	2,971	3,290	3,816	4,577	5,260	6,388	7,198	8,053	10,297	
Nagaland	3,972	4,467	4,812	5,839	6,588	7,257	8,075	9,436	10,527	11,759	13,203	14,832	17,749	20,099
Odisha	46,756	49,713	61,008	77,729	85,096	101,839	129,274	148,491	162,946	197,530	214,583	255,459	288,414	310,810
Punjab	79,611	82,249	90,089	96,839	108,637	127,123	152,245	174,039	197,500	226,204	256,430	286,809	319,117	349,826

(continued)

Table 1 (continued)

State/union territory	2001-02 in Rs. Crore	2002-03 in Rs. Crore	2003-04 in Rs. Crore	2004-05 in Rs. Crore	2005-06 in Rs. Crore	2006-07 in Rs. Crore	2007-08 in Rs. Crore	2008-09 in Rs. Crore	2009-10 in Rs. Crore	2010-11 in Rs. Crore	2011-12 in Rs. Crore	2012-13 in Rs. Crore	2013-14 in Rs. Crore	2014-15 in Rs. Crore
Rajasthan	91,771	88,550	111,606	127,746	142,236	171,043	194,822	230,949	265,825	338,348	403,422	459,215	513,688	574,549
Sikkim	1,136	1,276	1,430	1,739	1,993	2,161	2,506	3,229	6,133	7,412	8,616	9,957	12,377	
Tamil Nadu	148,861	158,155	175,371	219,003	257,833	310,526	350,819	401,336	479,733	584,896	665,312	744,474	850,319	976,703
Telangana	-	-	-	-	-	-	-	-	-	-	-	-	-	430,599
Tripura	6,370	6,733	7,551	8,904	9,826	10,914	11,797	13,573	15,403	17,868	20,982	23,855	26,810	
Uttar Pradesh	190,269	206,855	226,972	260,841	293,172	336,317	383,026	444,685	523,394	600,164	679,007	768,930	886,410	976,297
Uttarakhand	15,144	18,473	20,439	24,786	29,968	36,795	45,856	56,025	70,730	83,969	97,696	113,958	132,969	138,723
West Bengal	157,144	168,000	189,259	208,656	230,245	261,682	299,483	341,942	398,880	460,959	538,209	620,160	707,848	800,868
Andaman and Nicobar Islands	1,082	1,228	1,392	1,813	2,044	2,538	2,990	3,480	4,120	4,345	4,746	5,067	5,351	
Chandigarh	5,490	6,453	7,419	8,504	10,185	12,276	13,669	15,334	17,717	20,017	23,211	26,162	29,076	
Delhi	65,027	71,361	79,468	100,325	115,374	135,584	157,947	189,553	219,753	252,753	296,957	348,221	404,576	451,154
Puducherry	4,259	4,931	5,438	5,754	7,977	8,335	9,251	10,050	12,304	13,092	14,630	17,192	21,500	25,819
Lakshadweep	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daera and Nagar Haveli	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daman and Diu	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Retrieved from [https://en.wikipedia.org/wiki/List\\_of\\_Indian\\_states\\_by\\_GDP](https://en.wikipedia.org/wiki/List_of_Indian_states_by_GDP)

of Entrepreneurial Management Education is to produce the entrepreneurial leaders for a progressive future. Usually, an EM education may consist of some core curriculum and some elective curriculum. Core courses are essential and common for all, whereas candidates have the freedom to choose required number of credits from the elective curriculum depending on the area of their interest and necessity. Typically, a Major programme may consist of 32 credits, while a Minor programme may consist of 16 credits. A tentative list of core and elective curriculum for both Major and Minor programmes are furnished below (Table 2). This is an indicative one and dynamic in nature. It needs to be changed in line with the upcoming changes in the global business world. The dynamism of this curriculum will make it alive century after century to meet the need of global human being.

Since the target group of candidates for *Minor* course curriculum are having reasonably less academic background but with some experience in entrepreneurial activities in their life, it will be better for them if they go through a *Bridge/Foundation Course* consisting of papers like Business Communication Skill, IT Fundamentals, Basic Business Statistics and Mathematics, Fundamentals of Managerial Accounting, Basics of Economics, Critical Thinking & Reasoning and finally selected for admission to the *Minor* course curriculum on the basis of their performance in a *Bridge/Foundation Course examination*.

The teaching methodology for both the *Major* or *Minor* course curriculums of Entrepreneurial Management education is a very crucial issue. With a view to making the programmes more effective, it is necessary to adopt a blend different teaching methods like Lecturing, Demonstrating, Collaborating (*Classroom discussion, Debriefing and Classroom Action Research*) and Case study for different papers and topics. *Lecture method* is the primary method of teaching and most effective where the number of pupil is more, whereas *Demonstrating* is the process of teaching through examples or experiments. On the other hand, *Collaboration* allows students to actively participate in the learning process by interaction with each other and understanding of other's view point. Collaborative discussion may take a variety of form like Classroom discussion, Debriefing and Classroom Action Research. *Classroom discussion* is a democratic way of handling a class, where each student gets equal opportunity to put forward his/her views. *Debriefing* refers to conversational sessions that resolve around the sharing and examining of information after a specific event has taken place. *Classroom Action Research* is a method of finding out what works best to a particular class room so that one can improve pupils' learning. Finally, the *Case Study* method helps the students to understand a particular issue through analysing a real life story. Since the entrepreneurial Management education course curriculums contains diversified course modules, it is recommended to adopt the appropriate teaching methodology for a particular paper and particular topic based on the expertise of teacher and capability of student. Thus, the teaching methodology should not be a static one. It requires to be flexible and dynamic for batch to batch. Thus, while selecting candidates for a particular batch, it requires to choose similar aptitude possessor candidates.

**Table 2** Major and minor curriculums for entrepreneurship programme

Major curriculum (a 32-credits-based PG programme)		
Core courses—20 credits (compulsory)		
S. No.	Title of the course	Credits
1.	Fundamentals of entrepreneurial management	2
2.	Venture capital and the finance for innovation	2
3.	Management of innovation and change	2
4.	New business feasibility and planning	2
5.	Legal aspects of entrepreneurship	2
6.	Entrepreneurship development in north-east Indian culture	2
7.	Small business fundamentals	2
8.	Small business support service in north-east India	2
9.	Entrepreneurship in action (skill development programme)	2
10.	Project report (independent study in entrepreneurial management)	2
Elective courses—12 credits to be chosen from the following		
S. No.	Title of the course	Credits
1.	Principles of corporate finance	2
2.	Financial statement analysis	2
3.	Financial modeling	2
4.	International finance	2
5.	Building human assets in entrepreneurial ventures	2
6.	Leadership and personal development in the HR field	2
7.	Analysis & modeling for business systems development	2
8.	Corporate risk management	2
9.	Managerial psychology	2
10.	Negotiation strategies	2
11.	Entrepreneurial marketing	2
12.	Supply chain planning & control	2
13.	Marketing research	2
14.	Strategies and practices of family-controlled businesses	2
15.	Product design and development	2
16.	Techno- entrepreneurship	2
17.	Real estate entrepreneurship	2
18.	Project management	2
19.	E-business modeling	2
20.	Corporate development: mergers & acquisitions	2
Minor Curriculum (A 16 Credits Diploma Programme)		
Core Courses – 10 Credits (Compulsory)		
S. No.	Title of the course	Credits
1.	Fundamentals of entrepreneurial management	2
2.	Change management	2
3.	Business diversification feasibility and planning	2
4.	Entrepreneurship in action (Skill development programme)	2
5.	Project report (Independent study in entrepreneurial management)	2

Plus 6 credits to be chosen from the major elective courses as mentioned above

## 5 Conclusion

Entrepreneurial Management is a multifaceted phenomenon, and thus it is inevitable to introspect it through multiple lenses. In the present paper, EM has been discussed from three stand points. *First*, EM as a style of management in contrast to the traditional administrative management style, particularly, from Stevenson's (1983) viewpoint. *Second*, EM as a process that gives birth of new enterprise through innovative approach to address the unsatisfied demand of market, specially, from Calvin's (2004) standpoint. *Third*, EM has been conceptualized as a complete discipline for study within the purview of formal education system. EM education may be introduced through two course curriculums—Major (*a 32-Credits-based PG Programme*) and Minor (*a 16-Credits-based Diploma Programme*). In Indian context, EM education is going to play a vital role as the Central Government is highly interested for reform through more disinvestment in the small-scale sector. As far as the applicability of EM education in north-east India is concerned, it has a huge potential. To become an economically sustainable nation, India's growth story needs to be inclusive. But so far India's north-eastern region has experienced a reasonably slower pace of industrialization and socio-economic growth although the region is gifted with huge unexploited natural and human resources and is acknowledged as the eastern gateway of India's Look-East Policy. The statics of state-wise annual growth in normal GDP clearly reveals the poor economic development of north-eastern states (Table 1). This region has certain distinct advantages like—it is geographically situated with an access to the traditional domestic market of eastern India, along with proximity to the major states in the east and adjacent countries such as Bangladesh and Myanmar. The region is also a vantage point for the South-East Asian markets. North-east India has its unique characteristics of cultural diversity, topographic assortment, multiplicity of untapped natural and human resources, etc., in contrast to the other parts of the country. The north-east India has plenty of resources for entrepreneurial activities. At present, the main industries of this region are based on tea, crude oil, natural gas, silk, bamboo, handicrafts, etc. At this juncture, let us have a brief state-wise introspection to the resources that are available in the north-east India. *Assam* is the largest state in the north-eastern region of India. The state is full of natural resources that attract many investors. Assam is the store house of huge hydrocarbon, low ash coal, limestone, dolomite, minor minerals, Tea, etc. *Arunachal Pradesh* is one of the store houses of forest resources in India. A huge variety of Flora and Fauna species are available in this forest. Besides forest resources, Arunachal Pradesh is a store of graphite, dolomite, marble, limestone, coal, lead, zinc, gold, pyrites, etc. The major minerals that are present in *Meghalaya* include coal, limestone, clay, sillimanite, phosphorite, glass-sand, granite, quartz and feldspar, gypsum, gold, uranium, base metal, iron ore. The different resources of *Manipur* are copper, asbestos, limestone, chromite, nickel, lignite, salt, etc. Agricultural and horticultural resources are occupying very important place in *Mizoram* because more than 70% Mizo people are involved in it. The hard rock that is used in road and building

construction is plenty in Mizoram. Besides these, about 87% of the entire Mizoram is covered by forest resources. In *Nagaland*, limestone, marble, decorative stone, nickel, cobalt, chromium, basalt, chert, dunitite, gabbro, granodiorite, serpentine, spilite, pyroxenite, quartzite, etc., are available as resources of the state. The major resources that are available in the state of *Tripura* are natural gas, rubber, tea, bamboo, medicinal plant and forest resources. *Sikkim* is another store house of various mineral like dolomite, graphite, building stones, talk, coal, graphite, limestone, gold, silver, copper, zinc, etc. Besides, a variety of minerals that are available in the north-east India, the entire region is full of other resources like forest resource, agricultural resource, horticultural resources, aquacultural resource, a variety of flora and fauna that may easily be used for entrepreneurial activities. Even the diversified and colourful culture of the region can also be used as resources for entrepreneurship in the era of globalization. The proper implementation of EM education in the form of both Major and Minor may revolutionize the economic status of the region and may become a model before the nation. The dynamic nature of the proposed course curriculum of EM education will facilitate to groom the budding entrepreneurs and thus may help the region to achieve a sustainable economic growth even in the era of highly competitive globalized regime through adoption of Blue Ocean Strategy: Making the Competition Irrelevant.

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# Chapter 3

## Teaching the Elective, “Legal Aspects of Innovation and Entrepreneurship” to Management Students

K.V. Nithyananda

**Abstract** Courses on innovation and creativity are being taught at fine arts schools, engineering institutes and management schools among other places. Similarly, courses on entrepreneurship are being taught at engineering institutes as well as at business schools, both at undergraduate and at postgraduate levels. The author has found that the coverage of legal aspects of innovation and entrepreneurship (LAIE) in these courses is either negligently low or completely nonexistent. In this paper, the author demonstrates that the coverage of LAIE is essential to all graduates, which would equip them with necessary skill sets when they decide to become entrepreneurs. The author also demonstrates that such a comprehensive course on LAIE for management students is nonexistent in other Indian Institutes of Management in India and leads the readers toward a conclusion that designing such a course would definitely have takers. Relying on the experience of conducting executive education on this topic, the author is presenting this newly developed 3-credit course on LAIE by discussing its course objectives, its structure, the coverage and the pedagogy. He also shares the experiences and insights from teaching this course at IIM Trichy.

**Keywords** Teaching legal aspects to management students • Legal aspects of innovation and entrepreneurship • Creativity and innovation

### 1 Introduction

Generally, the students pursuing their master’s degree in management find business laws to be less relevant for their course. In a survey conducted by the author among the students pursuing their master’s degree in management at Indian Institute of Management Tiruchirappalli, Trichy City, Tamil Nadu, many of respondents have

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suggested that courses on business laws/legal aspects of business are to be offered as an elective, where only the students who are too keen in learning it could opt for it.<sup>1</sup> Many of them even perceive business laws/legal environment of business as a constraint, which curtails the freedom for conducting business activities.

In another survey conducted by the author, among the students pursuing technical education (Bachelor of Technology and Master of Technology) at National Institute of Technology Tiruchirappalli, Trichy City, Tamil Nadu, where many technical innovations are created and which has a separate incubation center to mentor them to become entrepreneurs, it was found that majority of them are bothered only about the technical side of innovations.<sup>2</sup> Having arrived at technical solution, they would then start worrying about the business dimension. Many of them are not aware about the legal dimensions associated with the innovation.<sup>3</sup> Surprisingly, many were not even aware of the patent system, which is to be used for protecting their innovation/invention.<sup>4</sup> The respondents from the technical background felt that business laws are to be taken care by advocates/lawyers and not by innovators/entrepreneurs.

However, innovators and entrepreneurs face varied business issues connected with business laws in more than one way. In order to solve these legal issues, the innovators and entrepreneurs should have to seek external legal help from qualified and well-trained legal practitioners, who can guide them through these legal issues and help them attain a solution well before these legal issues become legal problems. Innovators and entrepreneurs should develop such capability of learning about the legal environment in which they operate and the laws that affects their business.

In addition, the innovators and entrepreneurs should also develop a more positive approach toward managing the legal dimensions of business. As Constance Bagley puts it, they should stop viewing law and ethics purely as constraints to be complied with and reacted to. Instead, they should strive to develop the ability of becoming *“legally astute managers to practice strategic compliance management and to pursue opportunities to use the law and legal tools to increase both the total value created and the share of that value created by the firm”* (Bagley 2010, p. XVI).

Business law/legal aspects of business (BL/LAB) is one of the key aspects, which is to be learnt by innovators and entrepreneurs alike. With this intention in mind, the author has designed a course on legal aspects of innovation and

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<sup>1</sup>The author had conducted a survey among the students of Post-Graduate Programme in Management at Indian Institute of Management Tiruchirappalli, where almost 48% of the respondents from out of 100 respondents were of this opinion.

<sup>2</sup>Almost all (98%) the respondents from among the 50 respondents felt that only technical solution is what matters in innovation. The respondents were from varied background, all of them pursuing either their B.Tech or M.Tech courses in different streams/departments at NIT Trichy.

<sup>3</sup>About 62% of the respondents from among the above 50 respondents felt that they had no clue about legal environment in which they have to operate their business or innovative ideas.

<sup>4</sup>About 42% of the above respondents felt that patents are not required to protect the innovation/invention, and about 84% of the above respondents were not aware of the procedure to be followed to procure patent protection.

entrepreneurship (LAIE) to be taught to the students of Post-Graduate Management course at Indian Institute of Management (IIM) Tiruchirappalli. This paper explores various concerns the author encountered in designing this course. Some of these concerns were of fundamental structural issues raised by the institute, and some of them were operational in nature, which were raised by the students. Some of them were even philosophical, which the author started deliberating with students. These concerns have been categorized in simple terms as below, and these concerns would be addressed in subsequent parts of this chapter.

1. Should management students be exposed to the course of BL/LAB at the postgraduate level? (Sect. 2)
2. How is LAIE different from BL/LAB? (Sect. 3)
3. What should be the objectives, which this course aims to achieve? (Sect. 4)
4. What should be the contents of this course LAIE and how do we justify such content? (In Sect. 5)

These questions would be answered in subsequent parts of this paper. Also this paper would conclude with a draft course outline, which the author has developed for LAIE.

However, this paper is constrained by the following assumptions and limitations:

- The author is restricting the scope of this research only to the Indian Institutes of Management setup by the Ministry of Human Resources Development, Government of India. However, this might also be extended to other autonomous institutes of management, where the faculty member is free to decide on the curriculum and content, evaluation parameters as well as deliver the program. However, this does not extend to the typical university system, where the syllabus is designed by a board of studies, the delivery is by professors of the colleges affiliated with the university and the examination is conducted by the examination department of the university. This course would not work in such a setup, due to various reasons elaborated later.
- The author has relied on the data available purely on the Web sites of other IIMs, with regard to the courses being offered.
- This is a preliminary research work, and the author is carrying out an extensive analysis of both the prior literature and data being collected from other business schools.

## 2 BL/LAB in Business Schools

It has been questioned time and again as to why teach business laws/legal aspects of business (BL/LAB) in business schools. It is generally perceived that there is ambiguity about the scope of the course, the contents and the purpose of courses in business law, and whether this is a branch of business or a branch of law

(Isaacs 1920). The author feels that this is a question, which was settled long back, but the current administrators of business schools are not aware of these discussions and philosophical view points, which still creates the lingering question about the relevance of business laws for management education.

Harvard Business School, one of the most prestigious business schools in the world, was started in 1908. From the first year of its operation, Commercial Contracts was one of the four compulsory courses. The reason adduced to this decision by the faculty body at HBS was as follows:

[...] partly because so many problems in business administration involved legal contracts and partly because for that subject an abundance of legal cases, selected from those already in use in the Harvard Law School or easily available in the recorded decisions of the appellate courts, could readily be adapted to the needs of students of business administration (Copeland 1958, p. 22).

Prof. Nathan Isaacs, who was a distinguished Professor of Business Laws at Harvard Business School from 1923 to 1941, in his 1915 authoritative paper (Isaacs 1915) discusses the evolution of the argument to include business law in the curriculum of colleges of commerce and also discusses the irony of this process of including business law in such curriculum. He concluded that “*in the vast network of considerations that hem in a practical decision in business life, some of the most important threads are legal*” (Isaacs 1915, p. 561). After 1915, there has been a continuous debate on this matter. Prof. J.A. Burger provides a nice summary of the literature as well as empirical research on the evolution of the debate on this topic (Burger 1967).

Many a decisions to be taken by the manager needs to be within the boundaries fixed by the legal system. A manager would not be allowed to continue carrying on business, if he resorts to illegal activities and he would be penalized or in extreme situations, he might even be asked to shut down his business activities. Emphasizing the point that BL/LAB is very important for the students of business, Prof. James Donohue in his 1966 paper quotes the preface of a text book on business law, which is reproduced below:

The unprecedented growth of the American Economy has been accompanied by significant changes in the legal structure by which that economy is governed, with the result that students of business must today more than ever give serious attention to law and legal developments. For it can truly be said that to be lacking in the knowledge of the fundamental principles of business law is to be lacking in a knowledge of business. ((Smith and Gale 1962), p. 1 as quoted in (Donohue 1966), p. 2)

Given the fact that the business manager cannot do anything which is illegal, without basic understanding of BL/LAB the manager would be incompetent to carry out any business activity. However, the business manager is not expected to be his own lawyer, knowing the legal processes, techniques and procedures to be followed in pleading his/her case in the court of law. But rather, the business manager is expected to be an expert of a different kind, whose main responsibility is to run the business, as per the plans and focus provided by the shareholders and their representatives who are the Board of Directors. In order to execute such

responsibilities, a business manager should be functioning within the broad framework fixed by the legal system and also the regulatory system of the country.

As highlighted earlier, a business manager must develop legal astuteness toward his/her activities. Constance Bagley defines legal astuteness as the capability of *“the management team to learn about the law that affects their business and to adopt a more proactive approach to managing the legal dimensions of business. It also requires the lawyers to learn about the business so that they can participate actively in each stage of strategy formulation and execution”* (Bagley 2005, p. 5).

This may be the general approach for decision making in an established business organization. But the innovator/entrepreneur is at the infancy of the business activity,<sup>5</sup> and he might not need a legal representative on the senior management team. But nevertheless, he should be consulting an advocate/lawyer before operationalizing major management decisions affecting the business. Hence, it becomes pertinent that innovators/entrepreneurs also become legally astute, by being aware of the general legal principles affecting the business and also be comfortable in seeking professional legal opinion, before taking a major management decisions. Prof. Thompson and Prof. Brady emphasized this aspect in their seminal legal textbook on law in the business environment, as follows:

As a businessman of the future, the student will have frequent contact with Attorneys in such matters as drafting documents, or, less happily, in litigation. The student’s effectiveness in dealing with his attorney will depend in large measure on his ability to communicate with him, and to understand the function of the lawyer and his relationship to the businessman. The attorney-client relationship, unfortunately, has generally been neglected in business law courses [and in the management literature in general]. ((Thompson and Brady 1963), p. 3 as quoted in (Donohue 1966), p. 3)

Thus, the author feels that BL/LAB should be taught for students of management for multiple reasons:

- Law, though is generally considered to be constraining business activities, is actually a framework within which business activities are carried out.
- In addition to this, law also performs the facilitation function for the business, at various levels.
- Law has capability of creating and adding value to the business organization and to its activities, while minimizing unwanted risks thereof.
- Business managers should be aware the nature of law as well as its capabilities in addition to understanding the complexities of business activities in order to be able to execute the managerial functions effectively.
- Businessmen should become legally astute, viz., be aware of the legal aspects of the business and likewise advocates/lawyers should become aware about aspects of business, which would help carry out cordial communication between each other and carve out legally robust strategies in the market, based on the objective of creating value or minimizing risks.

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<sup>5</sup>It is assumed that the innovator/entrepreneur does not have an established business, but is now planning to enter into business or has just entered into business.

- Innovators and entrepreneurs are all the more vulnerable to competitors and market vagaries if they are not aware of the legal environment. Also they would not be able to reap the benefits accruing thereafter for creating value by minimizing risks in building a strong and robust business organization.

### 3 How is LAIE Different from BL/LAB?

Technically speaking, LAIE should not be significantly different from BL/LAB. This is because, in both the cases, the focal point is the business manager/decision maker, who should be taking business decisions to advance his/her strategic objectives. But the course of BL/LAB is generally considered broad based and would be designed assuming that there is a business activity in existence which needs to be safeguarded while simultaneously expanding its activities. This objective has been brought about in the prefaces of many standard international textbooks/reference books on BL/LAB, while also highlighting the need for a manager to study this course. Some of the prefaces are reproduced below:

The study of the legal environment of business has universal applicability. A student entering any field of business must have at least a passing understanding of business law in order to function in the real world. (Cross and Miller 2012, p. XV)

Now, more than ever before, a fundamental knowledge of the tenets of business law is crucial for anyone contemplating a career in business. (Miller and Jentz 2010, p. XV)

Courses on the legal and regulatory environment of business provide important background for students preparing for a variety of [business] career. [...] ignorance of the principles of law can result in problems. (Meiners et al. 2009, p. XVII)

Business law and the legal environment should be an exciting, contemporary, and interesting course. Business law should be linked to other disciplines of business like accounting, economics, finance, management, marketing, and taxation. (Miller and Jentz 2011, p. XV)

As highlighted in these objectives, the courses on BL/LAB have been generally designed to cover aspects of contracts, sale of goods, banking and negotiable instruments, partnership concerns, joint stock companies, environment protection, etc. It might also cover aspects of jurisdiction, where the case has to be filed, in case of litigation.

Some of the critics might raise an objection on the rationale of including these components in the course on BL/LAB. Nathan Isaacs addressed this objection, way back in 1915, by conducting an analysis on the matter.

He presents a very interesting analysis on the rationale for the contents to be included in the course on BL/LAB for commercial students and the justification therefor both from the historical perspective as well as the economic perspective. He states that business law is a selection from the general body of the law, which the professor thinks would be profitable to the businessman to know. He concludes

that a typical legal course for commercial students should include subjects like “*buying and selling (or exchange), credit and organization.*”<sup>6</sup>

Developing on this basic requirement, he provides for the contents of the course, which would include contracts (specifically dealing with salesmanship, representations, competition, warranties, conditions, fraud and dealers’ puffing, reality of the consent in a contract, negotiations and inducements that lead up to a contract; in a summary, it would include all its branches, formation, operation and discharge of contracts), money and banking and credits and collections (testing the safety of risks, elements of every risk, contractual arrangements for reduction of risks like liens, mortgages, conditional sales, guarantee, surety, indemnity and several contracts involved in negotiable instruments) and organization (internal relations of a business under the traditional heads of master and servant, principal and agent, partnership and corporations), with robust justifications for all the contents (Isaacs 1915, pp. 556, 557). An introduction to the concepts of jurisdiction, as well as the court procedures, could be a very important useful addition to the course, as the business manager who faces a business litigation might have to understand where and how to file a legal suit, either to defend the business or to sue others, who are infringing on the rights of the business.

The modern courses on BL/LAB have not changed much in terms of their coverage in the business laws textbooks.<sup>7</sup> The only exception seems to be the inclusion of certain modern legislations/topics or various combinations thereof like information technology act, industrial relations legislations, intellectual property legislations, competition related legislations, capital market legislations, taxation-related legislations, international trade legislations, alternative dispute resolution. These inclusions are only an extension of the older concept coverage suggested by Isaacs, or they are new areas of law, which were developed post-1915. But the overall philosophy has not changed much. Prof. Marc Lampe also arrives at a similar conclusion (Lampe 2006).

But the author feels that the course on LAIE should be completely different from the regular BL/LAB. In order to understand this, the author tried to understand the connection between innovation and entrepreneurship and also in continuation of this exercise tried to understand the courses being taught in India on innovation and entrepreneurship. The first part was conducted through the review of the existing literature, while the second part was achieved by conducting a survey of courses available on innovation and entrepreneurship and the focus of such courses.

The author found that innovation and entrepreneurship, especially in India, has been embedded in the daily life of any trader, for carrying out his day-to-day activities as well as, sometimes for his very survival in the market (Dabholkar and Krishnan 2013; Krishnan 2010). Though it may sound oxymoronic, both

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<sup>6</sup>Prof. Isaacs found it hard to decide on the aspects to be included in the course of business law, relying only on the legal systems. But when he used the assistance of economics as a field and interacted with business experts, he was able to arrive at these choices.

<sup>7</sup>The author has reviewed most of the textbooks available in the market for the postgraduate students pursuing management education and arrived at this conclusion.



innovation and entrepreneurship goes hand in hand, in order to reap the benefits of a successful innovation, which has market potential. In order to be successful at innovation, the innovator has to be extremely creative, able to visualize various dimensions of the problem/challenge and then solve them creatively. Having once arrived at a creative solution to a problem/challenge, the innovator has to test its robustness, suitability, viability as well as practicability. Once the solution passes these tests, the product is ready for pilot launch and then for a full launch. If the launch becomes successful, then the innovative solution would be the launching pad for the next entrepreneurial pursuit.

The earlier conception that innovation and creativity cannot be taught (Gaynor 2002) is gradually making way for professional courses, both at the undergraduate level and at the master-graduate levels. Interestingly enough in India, the courses on innovation and creativity are being taught as part of many courses. For instance, fine arts and liberal arts schools cover courses like innovation and experience design (Technology 2013b) and designing education (Technology 2013a); institutes of fashion and designing cover courses like creative thinking and design development (Delhi 2013) and some institutes even offer masters level courses on design; Indian Institutes of Technology are also offering courses on design and innovation (PTI 2013); management institutes also offer courses on creativity, innovation, knowledge networks and entrepreneurship (Ahmedabad 2013), as part of the masters program to management student (Dabholkar 2013). However, what is striking about these courses, with the exception of the course offered at IIM Ahmedabad, is that none of these courses talk about legal aspects of innovation. None of them even cover aspects of patent laws to seek protection for their innovation/inventions.

Entrepreneurship as a course is taught in almost all the streams of education (in technical institutes, in management institutes, in accounting courses, in liberal arts courses, in legal courses, etc.), at all the levels (both undergraduate and master graduate) as well as by all the universities. There is no specific uniqueness about these courses. But none of these courses discuss anything about the legal aspects of entrepreneurship.

It would also be prudent to understand the interaction of different laws during the different phases of organizational creation and development as a result of innovation and entrepreneurship. But Constance Bagley has already done extensive work on this area, where this aspect has been tabulated in a comprehensive manner. (Bagley 2005, pp. 15, 16; Bagley and Dauchy 2008, pp. XVI, XVII). Further information relating to the complexity associated with LAIE could be had from these sources.

## 4 Course Objectives of LAIE

It has been well established that legal environment has capabilities of both creating value and mitigating risks, for the business (Bagley 2005). Innovators and entrepreneurs can, for instance, create value for themselves and their business by seeking

protection for their innovative/entrepreneurial ideas under the existing intellectual property protection regimes like patents, copyrights. This would protect their ideas from being appropriated by competitors. Finding new avenues of leveraging these intellectual property rights once granted, like licensing, collateralizing, sale, of the innovative ideas, which increases the potential value of the business, is also available under the existing legal regimes. However, within the same intellectual property regime, the innovators and entrepreneurs can exercise caution and mitigate future risks for their business. While they are developing on their innovative ideas, they can verify using the existing patent system databases for any existing technology, which overlaps on their technology. This could be through existing patent rights granted in favor of other inventors or competitors having freedom to operate within the technology space. This would enable the innovator or entrepreneur to firstly decide on whether to continue on such path of research and secondly to decide on whether to license such competing technology, in order to continue the research on the field. Constance Bagley provides a very good overview of legal tools for increasing realizable value while minimizing risk, for different stages of business development, which are neatly classified under the broad themes of creating and capturing value and minimizing risk (Bagley and Dauchy 2008, pp. XVI, XVII).

Based on the philosophy of this dedicated course on LAIE discussed in the earlier part of this paper, the author feels that the following course objectives could be appropriate for LAIE. The course would aim at providing “*a broad and detailed understanding of how law impacts daily management decisions and business strategies of a new venture. It offers legal tools that innovators and entrepreneurs can use to manage their innovation and enterprise more effectively. It would also appraise them with the traps and tribulations, so that innovators and entrepreneurs can both spot legal issues before they become legal problems and effectively handle inevitable legal disputes that will arise in the course of carrying out innovations or managing the enterprise*” (adapted from the course objective provided in the preface of Bagley 2010, p. XVI).

As an extension, it could also include the following as the course objective: “*Legal aspects of Innovation and Entrepreneurship is at the core of the private market because it determines who owns what and protects owners so the innovators and entrepreneurs can make decisions about how to make what they own most productive*” (adapted from the course objective provided in the preface of Reed et al. 2009, p. VI).

This course on LAIE could aim to equip the students to be prepared with both knowledge of the law and the skill of applying it in the business setting. This could be achieved by teaching principles and application through interaction with examples and by working the way through dilemmas, issues and problems (adapted from the course objective provided in the preface of Miller and Jentz 2011, pp. XXIX, XXX).

## 5 Contents of the Course

Having set the objectives of the course of LAIE, the author feels that the following contents could be appropriate for the 20 sessions of 90 min each (equivalent to a total of 3 credits) shown in Table 1.

This course outline provides the basic elements of legal aspects of both innovation and entrepreneurship. If we look at sessions 1–7, it is basically covering the aspects related to intellectual property laws. This would be helping the innovators in seeking legal protection for their innovation/invention. In addition, these sessions would also help them leveraging those innovations. It would deal with valuation of IPR, leveraging techniques like licensing, lease and sale, franchising contracts. Having understood the process of monetizing innovations/inventions, the entrepreneur would then start looking at expanding the business, at which time he would be needing the grounding in the various forms of organizations available in India and when to choose what form of organization.

Once the organizational form is decided, the entrepreneur would start looking for funding from various sources. Depending on the stage on the venture the entrepreneur is, he might explore options of angel funds, venture capital or private equity. In order to appreciate the funding process, legal aspects of contracts related to funding and transfer of stakes, etc. becomes prudent at this juncture. Having procured the funding, the entrepreneur should start recruiting employees for execution of the business plans. He needs to start considering the employment contracts that he would have to sign with key employees of the venture, which might include aspects like ESOPs, sweat equity, perks, benefits. After this stage, the entrepreneur would have to negotiate contracts with the suppliers and manufacturers for carrying out transactions with the bankers. Legal aspects associated with these should also be covered in this course.

Once the product starts hitting the market and starts becoming successful, copying/duplicating the product/service by the counterfeiters would start. At this stage of the organization, the entrepreneur should start enforcing his intellectual property rights. After this, the market would quite often present opportunity to an entrepreneur to commit wrongs, which would be legally classified as unfair trade practices. Understanding its nature and implications becomes very important for the entrepreneur, in order not to be trapped by market regulators.

After reaching sufficiently large stage of the organization, the entrepreneur should start thinking about the public listing of shares through IPO. This would help him in safeguarding his position as well as capitalizing on the efforts put in making the venture happen and successfully happen. A thorough discussion of SEBI regulations, the company law processes and procedures, negotiations, valuations, etc. would be covered at this juncture.

Though this material tries to cover material on legal aspects of innovation and entrepreneurship, an entrepreneur would always like to understand the processes of import and export, as well as legal aspects applicable in other international jurisdictions. As the permutations and combinations would be endless and also as the

**Table 1** Coverage of the course legal aspect of innovation and entrepreneurship

Session no.	Legal aspect	Aspect being covered	Coverage
1	Intellectual property rights	Innovation protection	Introduction to the intellectual property regime in India and the rationale for seeking protection under the IPR regime
2	Intellectual property rights	Innovation protection	Patent rights, designs, integrated circuits protection—with detail process, procedures and rationales
3	Intellectual property rights	Innovation protection	Copyrights, trademarks, trade secrets, open source—with detail process, procedures and rationales
4	Valuation of intellectual property rights	Valuation of IPR for leveraging it	Methods of valuing IPR
5	Leveraging intellectual property rights	Innovation leverage	Licensing contracts, lease contracts, sale contracts
6	Leveraging intellectual property rights	Innovation leverage	Collateralization contracts, securitization contracts, etc.
7	Leveraging intellectual property rights	Innovation leverage	Franchising contracts
8	Forms of business organizations	Enterprise structure	Partnership, limited liability partnership, joint stock company, etc.
9	Angel funds, venture capital and private equity contracts	Raising entrepreneurial finance	Contents of the term sheet, process of funding, negotiation techniques, sweat equity, pitfalls and opportunities
10	Angel funds, venture capital and private equity contracts	Raising entrepreneurial finance	Finalizing the contract, transfer of ownership, strategic impact on the enterprise
11	Recruitment contracts	Employment contracts	Process of hiring staff to run the enterprise, contract formation, negotiations, ESOPs and other benefits, etc.
12	Supplier contracts	Procurement contracts	Contents, negotiation, implications, etc.
13	Sale of goods and consumer protection	Sale related legislations	Sale of goods, conditions and warranties, transfer of possession and ownership, sale and agreement to sell, breach, defect and deficiency, consumer dispute redressal mechanism
14	Banking legislations	Banking	Banking regulations, financing by banks, process of granting loans, security for loans, power of lien, etc.
15	Negotiable instruments	Banking	Negotiable instruments, endorsements, clearances, etc.
16	Unfair trade practices	Marketing laws	Packaging, weights and measures, deceptive advertising, etc.

(continued)

**Table 1** (continued)

Session no.	Legal aspect	Aspect being covered	Coverage
17	Unfair trade practices	Marketing laws	Anticompetitive practices, fraudulent trade practices, etc.
18	Enforcing intellectual property rights	IPR	Preventing counterfeiting and infringements, enforcing IPR, negotiations, mediation and litigation strategies
19	Public offering of shares	IPO	IPO process, SEBI guidelines, valuations, negotiation of the term sheet, etc.
20	Summary and feedback		

*Source* Created by the author

scope and complexity involved in such international transactions could be very complicated, it is always suggested that such aspects be covered under a separate course on legal aspects of international business, rather than combining it within this course. But it might be advisable to give an introductory coverage of legal aspects of international business as a passing remark during the expansionary phase of the organization.

This course thus provides a broad overview of legal aspects, which any innovator and entrepreneur should be aware of. It tries to visualize the process, which an entrepreneur would take in the course of his venture, and it provides them with the relevant laws applicable at each of those stages, which remains the core objective of this course.

## 6 Operationalizing the LAIE Course

Having designed this course, operationalizing this course is quite another challenge in itself. The author understands that there is no ready-made textbook available in the market, which deals with these contents. Hence, the professor taking up this course for teaching has to invariably write the entire textbook and reading material for the course. Alternatively, the professor should source the materials from various sources and compile it as a reading material for the students. This is one of the most challenging aspects of operationalizing this course.

In addition to this, what is the most appropriate method of teaching is something, which individual faculty members have to decide. Nathan Isaacs was of the opinion that such courses on BL/LAB should be taught only through cases. Others are of the view that it should be more focused toward addressing the managerial decision-making process. But whatever is said, it should be understood that the methodology and pedagogy to be used is the individual faculty member's prerogative and is dependent on the level of expertise the faculty member has attained

in each of the teaching techniques. The author would not like to dwell upon this matter in this paper and would leave this matter to be researched and discussed by other authors, who could conduct an experiment on different teaching methodologies to arrive at an optimal methodology to be followed.

## 7 Concluding Remarks

With an intention of empowering the innovators and entrepreneurs by providing them with the right legal education to carry out their activities without fear and favor, as well as without any hindrance, the author has designed an elective course on legal aspects of innovation and entrepreneurship to be taught for the PGP students at IIM Trichy. Though it is earmarked for management students, it can be taught at any level, be it technical courses, courses on liberal arts and courses on other professions as well. Considerable thought process has gone into this designing this course, despite absolute scarcity of the prior literature on this topic.

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# Chapter 4

## Developing a Curriculum for Entrepreneurship Education: Prioritizing the Content Using TOPSIS Method

Chandra Sekhar, Manoj Patwardhan and Vishal Vyas

**Abstract** The quest for entrepreneurship education and its status in India needs to be developed by 2020. The present study aims at student preferences affecting entrepreneurship education. The first aim is to explore the related literature and factors of entrepreneurship education which have an influence on entrepreneurial intentions, and the second aim is to prioritize the factors of entrepreneurial intentions. A questionnaire based on dimensions, viz. personal attraction, subjective norm, perceived behavioral control/self-efficacy, entrepreneurial intention, locus of control, need for achievement, and instrumental readiness (Gerba 2012), was distributed among the budding entrepreneurs from national institutes located in northern central part of India, by using “convenience sampling” method. A sample size of the study was 52 with a response rate of 49.52%. multi-criteria decision-making (MCDM) approach (AHP and TOPSIS) is employed to find out the weight of the factors as criteria and to obtain a final ranking of the entrepreneurial intention elements with a special focus on professional education from postgraduate engineering and management students. Research finding suggests that development of entrepreneurship cell and the business incubator is required in the institutes for the budding entrepreneurs. Theoretical contribution of present study includes the development of theoretical framework of entrepreneurship education factors to identify their priorities that help the national institutes for incorporating the entrepreneurship curriculum successfully.

**Keywords** Analytic Hierarchy Process (AHP) · Entrepreneurship education · Intention · Locus of control · Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS)

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# 1 Introduction

The purpose of education is to provide a driver for economic growth. Many authors (Urbano and Guerrero 2013; Wennekers and Thurik 1999; Storey 1994; Acs and Audretsch 1991; Drucker 1985) suggest that entrepreneurship has been considered as a key component of economic growth, innovation, and employment. Van Praag and Versloot (2007) and Wennekers et al. (2005) showed that entrepreneurial activity and economic development are positively related to each other. Entrepreneurship education is the key component of management education. Consequently, growth in management education and entrepreneurship education in specific has gained momentum in the recent time period. This momentum in the entrepreneurship education is attached to as activity for academic investigation and as a practical activity in both public and private institutions. Kuratko (2005) opined that entrepreneurship skills can be learned with the help of well-developed modules incorporated as a part of institute's curriculum and suggested that higher the quality of entrepreneurship education, then it is more likely that the improved entrepreneurship quality will result.

The main purpose of entrepreneurship education is to facilitate students for the development of needed skills to start an enterprise. On the contrary, those who have gone through the technical knowledge and skills at their parent institutes have benefited from supplemental training to learn small business management. For these concerns, entrepreneurship education has gained the consideration of governments, policy makers, and academicians from different corners of the country and the world in order to promote and encourage it. Therefore, the earlier researches carried out by different authors (Grimaldi et al. 2011; Lockett et al. 2005; Phan et al. 2005) are putting strong efforts on the process of creation and development of entrepreneurial institutes and university. The academicians and researchers of the concerned university are involved in developing such type of environment and resources that support the commercialization and transformation of knowledge and technology. This brings the attention of entrepreneurial university that could attract and generate new enterprise and promote competition and diversity. In other words, we can say that entrepreneurship education in the Indian context is still in an embryonic stage and therefore lacks sufficient empirical evidence. Within university and institutes, there is a need for supportive climate that promotes the drive for innovation and entrepreneurship activity among the prospective entrepreneurs. The incorporation of entrepreneurial-oriented courses at all levels of curriculum or the commencement of institutes/universities in specific could lead India to achieve developed status by 2020.

Entrepreneurship education needs to be analyzed from two perspectives: *First perspective* would be the entrepreneurship education along with management courses and the entrepreneurship education as a separate course or domain. Entrepreneurship educated along with the management education is needed to be more accessible to all prospective entrepreneurs of all public and private institutes and to everyone with the desire to learn about leadership and management.

The *second perspective* is that entrepreneurship would be considered as a separate domain and need to be more pragmatic and specific in particular. These methods of adopting the entrepreneurship programs help to generate different ideas that promote new business initiation and provide a variety of resources and capabilities that facilitate a sustainable competitive advantage (Urbano and Guerrero 2013; Kirby 2002). As a result, the image of the entrepreneurship profession as a career is boosted through developing incentives for academic to participate in the entrepreneurial process as suggested by (O'Shea et al. 2005). In the same way, the educational initiatives that focus on entrepreneurship training and education are needed to be incorporated into the business plans of mid-sized and large corporations. These movements of entrepreneurial training for young and adults with sufficient available resources are helpful in business plan preparation, and in particular as a tool for second chance education for those who are not engaged in entrepreneurial education, training, etc., and act as a facilitator for budding entrepreneurs of coming generations. Entrepreneurship education can empower students and renew their faith in themselves as productive workers and future entrepreneurs. With very limited entrepreneurial intention research in India, this research attempts to prioritize the factors of entrepreneurship education among the budding entrepreneurs from the national institutes located in the northern central part of India.

## 2 Literature Review

Entrepreneurship was crucial to enhancing productivity, growing competition and innovation, generating employment and prosperity, and revitalizing communities as suggested by Higgins et al. (2013). Scholarly contribution consists of linking the emerging literature on entrepreneurship education, and intentions have increased enormously (Gerba 2012; Engle et al. 2010; Liñan and Chen 2006, 2009; Harris and Gibson 2008; Wilson et al. 2004, 2007; Souitaris et al. 2007; Grubb et al. 2006; Rotefoss and Kolvereid 2005; and Peterman and Kennedy 2003). Entrepreneurial intentions are defined by many authors (Sesen and Pruett 2014; Souitaris et al. 2007; Drennan et al. 2005) as a connection or intention of an individual to start his/her business undertaking. Many earlier researchers (Pittaway and Hannon 2008; Kuratko 2005) revealed that there has been significant academic research undertaken to study the relationship between education and entrepreneurial intentions. However, the globalization impact has become major research areas, and these result in the most comparative studies of entrepreneurial intentions. Comparatively, very few works have been undertaken to explore the related literature and factors of entrepreneurship education which have an influence on entrepreneurial intentions. Carter and Collinson (1999), in one of their studies, argue that there has been significant debate over the entrepreneurship education and entrepreneurship intentions. For example, a study undertaken by (Arenius and Minniti 2005 and Delmar and Davidsson 2000) suggests that budding entrepreneurs incline to be highly educated. For these concerns, there is a strong need to develop innovative ways of

thinking an ideal method of pedagogy that can be beneficial in developing entrepreneurial approaches to education (Gibb 2002). For these purposes, national institutes considered for the present study are needed to be challenged to deliver motivational and well-developed entrepreneurial programs, inculcating the necessary skills sets and abilities required for dealing with the uncertain competitive business environment (Matlay 2011; Bumpus and Burton 2008; Tan and Ng 2006). A study was undertaken (Giacomin et al. 2011) on entrepreneurial education and intentions in American, Asian, and European students and found that entrepreneurial intention also varies with the change in the nation. These variations in intentions should be taken care while designing the entrepreneurship course curriculum. Likewise, Packham et al. (2010) have undertaken a comparative study among the German, French, and Polish students and state that entrepreneurship education has a positive effect on entrepreneurship intentions. However, they posit that there is a positive effect among the French and Poland students and negative effect among the German students. In the same way, many earlier authors (Sesen and Pruett 2014; Krueger et al. 2000; Davidsson 1995; Krueger and Carsrud 1993; Ajzen 1991) revealed that the best predictor of entrepreneurial behaviors is his or her intentions for the same. Similarly, Fayolle 2008; Katz 2003; Solomon 2002; Robinson and Hayes 1991 advocate about the positive relationship between entrepreneurship education and university environment. In addition, Kolvereid and Moen (1997) undertaken their study on entrepreneurship education and concluded that the students who have studied the entrepreneurship course during the university education had the higher entrepreneurial intentions than those who did not. Likewise, Cheng et al. (2009) carried out the similar studies in Malaysia and indicated that those who had an entrepreneurship course possess higher intentions to be an entrepreneur. Schwarz et al. (2009) revealed the similar results and stated that educational environment and entrepreneurial intentions are positively related with each other. Today, many institutes and universities in India as well as in foreign (e.g.—EDI, Harvard University, and MIT) offer undergraduate or graduate level entrepreneurship courses, and these institutes or universities are some of the major players in these countries. Iakovleva et al. (2011) carried out a comparative study in developed and developing countries and revealed that students of developing nations have a strong desire for entrepreneurship as a profession than those in developed countries. They posit that the economic dynamism in developing countries encourages students for new venture creation. A similar comparative study undertaken at Germany and Portugal by Franco et al. (2010) concluded that there is a strong impact of regional differences in entrepreneurial intention such as students belonging to the central Portugal are more attracted toward the entrepreneurship activity than those belonging to the different regions of eastern and western Germany. Earlier researches undertaken by Henderson and Robertson (1999) found that 67% of those studying entrepreneurship courses expressed a desire for self-employment. Likewise, a similar study carried out by Liñán (2004) suggests that entrepreneurship education is helpful in supporting the budding entrepreneur's intentions toward the entrepreneurial process. Many authors (Hattab 2014; Wang and Verzat 2011) have made a similar consensus as made by (Liñán 2004) and stated that entrepreneurial

process can be promoted by entrepreneurship/business education. Dickson et al. (2008) in one of their study posit entrepreneurship education is positively associated with entrepreneurship process. Entrepreneurship process can be promoted through reformation and reorganization of the educational system as suggested by Ertuna and Gurel (2011).

### **3 Problem Statement**

To enhance the perennial problem of entrepreneurship, there is a dire need to put greater emphasis on entrepreneurship education initiatives across all the institutes for better progress and entrepreneurship initiative. Toward achieving these, there is a need for people with entrepreneurship skills and foresight who can critically engage issues of entrepreneurial activity and develop a social compact that helps to lead India forward. Here, the need for an enterprising culture such as entrepreneurship cell (e-cell) and the business incubator is required in the institute and colleges for the budding entrepreneurs, wherein talent is inspired to take up the challenge of turning their ideas into successful enterprises, and the need for enterprise education—within higher education—was reiterated.

### **4 Research Methodology**

The present study encompasses following research methodology.

#### ***4.1 The Analytic Hierarchy Process***

AHP is a MCDM technique that is helpful in categorizing the problem in a multi-level hierarchical structure, viz. criteria and subcriteria, up to the final level (Sekhar et al. 2016). The AHP method does not include many experts in the survey process because this is a subjective methodology as suggested by Sekhar et al. (2015), Cheng and Li (2001). Few respondents with experience and knowledge are included in the whole process as it is applied in handling complex problems (Sekhar et al. 2015; Takala et al. 2006). Step-by-step flow diagram of AHP process is depicted below in Fig. 1.

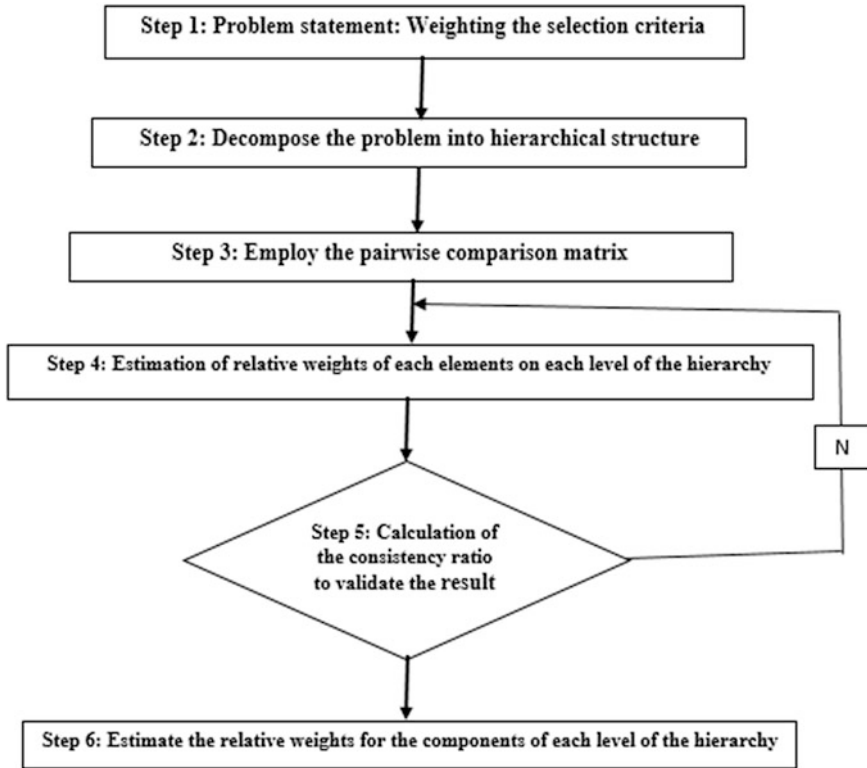


Fig. 1 Flow diagram of AHP process

**The calculation steps AHP are shown below:**

1. Normalized weight is calculated by dividing each value of column by the sum of respective column
2. Priority vector is obtained by dividing the SUM of each row with number of elements.

$$SUM/N$$

3. Consistency ratio (CR)

$$CR = CI/RCI \leq 0.1$$

where

CI Consistency Index

RCI Random Consistency Index

$$CI = \lambda_{max} - n/n - 1$$

## 4.2 TOPSIS Method

TOPSIS is a multi-criteria decision-making (MCDM) technique that has gained interest among the researchers, with number of papers increasing year by year. TOPSIS method was first developed by Hwang and Yoon (1981). They revealed that the method is useful in ranking of alternatives, comparison of the alternatives, etc. The ranking of the alternatives is based on the shortest and farthest distance from the ideal solution (Sekhar et al. 2015). The shortest distance solution is called as the positive ideal solution (PIS), and farthest distance is called as the negative ideal solution (NIS). Cheng et al. (2000) revealed that the TOPSIS method compares each alternative with others and the method is regarded as the utility-based method.

**The calculation procedure of TOPSIS is described below:**

In TOPSIS method, we assumed “ $m$ ” as the alternative and “ $n$ ” as the criteria/attributes. Alternatives and criteria have the score with respect to each other.

- Let  $x_{ij}$  score of option  $i$  with respect to criterion  $j$   
We have a  $X = (x_{ij}) m \times n$  matrix.
- Let  $J$  be the set of benefit attributes or criteria (more is better)
- Let  $J'$  be the set of negative attributes or criteria (less is better)

**Steps of TOPSIS** (Jamali and Tooranloo 2009):

**Step 1: Formulation of normalized decision matrix**

- First step helps to convert numerous attributes
- This step transforms various attribute dimensions into non-dimensional attributes, which allows comparisons across criteria.

Normalize scores or data as follows:

$$r_{ij} = x_{ij} / \sqrt{(\sum x_{ij}^2)} \text{ for } i = 1, \dots, m; j = 1, \dots, n$$

**Step 2: Formulate the weighted normalized decision matrix**

- Assume we have a set of weights for each criteria  $w_j$  for  $j = 1, \dots, n$ .
- Multiply each column of the normalized decision matrix by its associated weight.
- An element of the new matrix is as follows:

$$v_{ij} = w_j r_{ij}$$

**Step 3: Calculation of positive ideal and negative ideal solutions**

- **Positive ideal solution.**

$$A^* = \{v_1^*, \dots, v_n^*\}, \text{ where } v_j^* = \{\max(v_{ij}) \text{ if } j \in J; \min(v_{ij}) \text{ if } j \in J'\}$$

- **Negative ideal solution.**

$$A' = \{v'_1, \dots, v'_n\}, \text{ where } v'_j = \{\min(v_{ij}) \text{ if } j \in J; \max(v_{ij}) \text{ if } j \in J'\}$$

**Step 4: Estimate the separation measures for each alternative.**

The separation from the ideal alternative is as follows:

$$S_i^* = \left[ \sum (v_j^* - v_{ij})^2 \right]^{1/2} \quad i = 1, \dots, m$$

Similarly, the separation from the negative ideal alternative is:

$$S'_i = \left[ \sum (v'_j - v_{ij})^2 \right]^{1/2} \quad i = 1, \dots, m$$

**Step 5: Compute the relative closeness to the ideal solution  $C_i^*$**

$$C_i^* = S'_i / (S_i^* + S'_i), \quad 0 < C_i^* < 1$$

Select the alternative with  $C_i^*$  closest to 1.

**4.3 Data Collection Approach**

The survey of the study was conducted during November 2014 to December 2014. The respondents were the students of national institutes located in the northern central part of India. The rationale behind selecting the national institutes is situated in the northern central part of India, as there is huge concentration of national institutes located in this region. The respondents were the budding entrepreneurs, and they are more of diversified in nature. The basic criteria for selecting the respondents are as follows:

1. Requisition of postgraduation degree and knowledge in the respective areas.
2. Budding entrepreneurs are having less than 30 years of age.

Initially, 105 respondents were made contact and requested by the authors to participate in the AHP–TOPSIS survey process. Respondents were identified by means of “convenience sampling” approach. Eventually, only 52 budding entrepreneurs were agreed to participate in the survey process. Questionnaire was distributed via e-mail. Response rate was 49.52, follow-up of the respondents was done to resolve the question-related queries, and the process is also helpful in eliminating the case of non-response bias in the present study.

## 5 Results and Discussion

Seven dimensions of entrepreneurship education were considered in the present study for the formation of AHP–TOPSIS hierarchy model, and the dimensions are depicted in Table 1. The AHP–TOPSIS hierarchy model is shown in Fig. 2. Initially, problem statement and weighting the selection criteria are carried out. Later on, the decomposition of the problem statement into hierarchical structure process is taken into account. Then, pairwise comparison is employed. Consistency ratio (CR) is calculated for validating the degree of consistency among the selected dimensions and criteria. The CR value for the present study is less than  $<0.1$ ; it shows that decision taken by the respondent is consistent and valid for further analysis. TOPSIS method is utilized to obtain the final ranking of factors of entrepreneurship education and subdimensions. Table 4 exhibits the final priority of factors of entrepreneurship education in national institutes located in the northern central part of India (Tables 2 and 3).

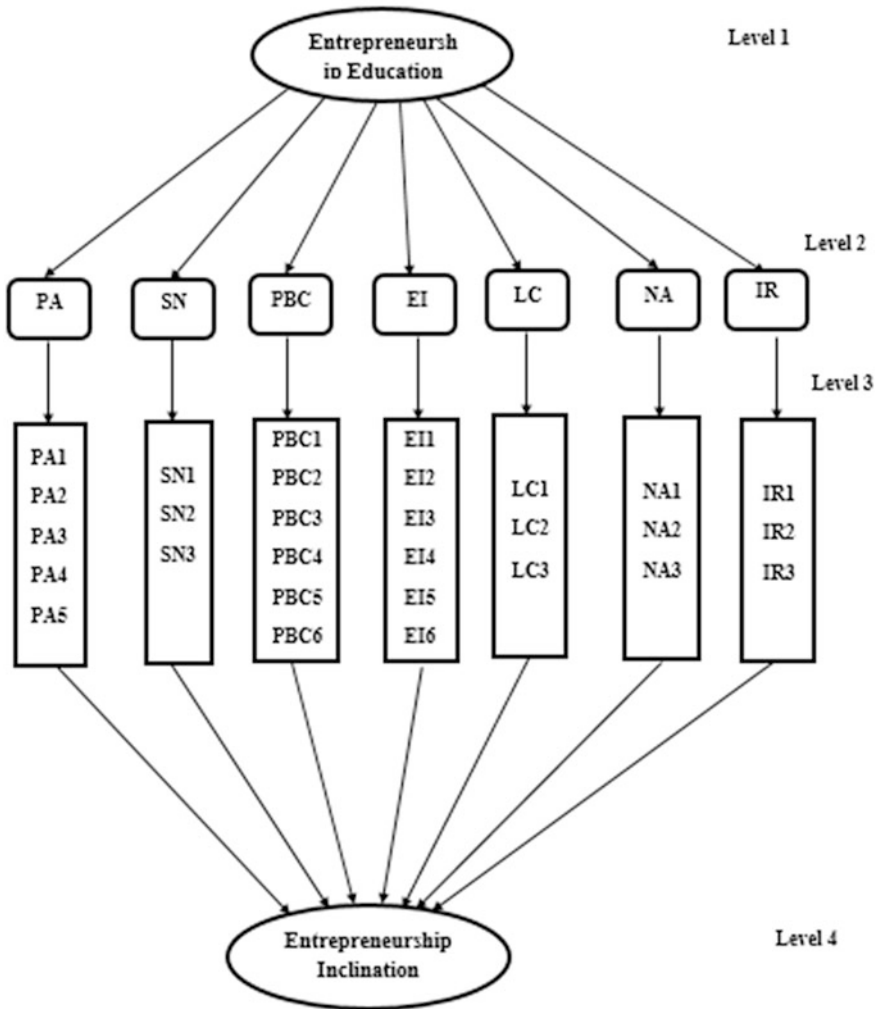
Present study proposes a new perspective, viz. prioritization of factors of entrepreneurship education. Among all the factors of entrepreneurship education considered for the study, *entrepreneurship intentions* are reported as the best one. The drawn result from the analysis on the entrepreneurial intentions is  $EI2 > EI1 > EI4 > EI3 > EI5 > EI6$ . It shows that budding entrepreneurs are like to become an entrepreneur and are the best alternatives for the entrepreneurship intentions. There is a need to focus more on the alternative (EI6), i.e., building confidence for the purpose to start the enterprise. Likewise, the second best factor emerged out to be the *subjective norm* with an alternative ranking order as  $SN2 > SN1 > SN3$ . Here, the potential entrepreneur has the psychological view that the entrepreneurship as the profession is being accepted by their respective family members. In addition, the factor *perceived behavioral control/self-efficacy* is the third most important factors of entrepreneurship education. The alternative ranking order is  $PBC6 > PBC1 > PBC4 > PBC3 > PBC2 > PBC5$ . Here, the promising entrepreneurs are ready to start their viable firm, and they are more confident enough for their enterprise success in the years to come. However, some more focus is needed to be given on future planning process. In the same way, *locus of control* appeared as the fourth most important factors of entrepreneurship education. The alternative ranking order is  $LC3 > LC2 > LC1$ . Correspondingly, *need for achievement* is reported as the fifth most important factor. The alternative of



**Table 1** Factors of entrepreneurship education

Sl. no.	Dimension		Author(s)
1	<i>Personal attraction (PA)</i>		
	PA1	Opportunity spotting	Liñan and Chen (2006, 2009), Gerba (2012)
	PA2	Team building	
	PA3	Salaried work	
	PA4	Liberal profession	
	PA5	Be an entrepreneur	
2	<i>Subjective norm (SN)</i>		
	SN1	Get support from family and friends to start my own business	Krueger et al. (2000), Liñan and Chen (2006, 2009), Gerba (2012)
	SN2	Family members consider me as an entrepreneur	
	SN3	Entrepreneurship as a profession would be accepted by close friends	
3	<i>Perceived behavioral control/self-efficacy (PBC)</i>		
	PBC1	Confident enough to succeed if I started my own business	Ajzen (2002), Liñan and Chen (2006, 2009), Gerba (2012). Liñan and Chen (2006, 2009), Gerba (2012)
	PBC2	Easy for me to start my own business	
	PBC3	Education would be the best way to start my own business	
	PBC4	I have the skills and capabilities required to succeed as an entrepreneur	
	PBC5	Future planning carefully	
	PBC6	Prepared to start a viable firm	
4	<i>Entrepreneurial intention (EI)</i>		
	EI1	Ready to make anything to be an entrepreneur	Indarti and Kristiansen (2003); Liñan and Chen (2006, 2009); Gerba (2012)
	EI2	Professional goal is becoming an entrepreneur	
	EI3	Make every effort to start and run my own firm	
	EI4	Determined to create a firm in the future	
	EI5	Seriously thought in starting a firm	
	EI6	Got the firm intention to start a firm some day	
5	<i>Locus of control (LC)</i>		
	LC1	Creativity	Indarti and Kristiansen (2003), Gerba (2012)
	LC2	Creative problem solving	
	LC3	Intuitive decision making	
6	<i>Need for achievement (NA)</i>		
	NA1	Positive thinking	Indarti and Kristiansen (2003), Gerba (2012)
	NA2	Vision	
	NA3	Being independent	
7	<i>Instrumental readiness (IR)</i>		
	IR1	Intend to set up a company in the future	Indarti and Kristiansen (2003), Gerba (2012)
	IR2	Spend time learning about starting a firm	
	IR3	Saving money to start a business	

**Prioritizing the factors of entrepreneurship education using AHP-TOPSIS approach**



**Fig. 2** Schematic of AHP-TOPSIS model

*need for achievement* ranks in the following manner  $NA3 > NA2 > NA1$ . The promising entrepreneurs have the strong desire to be independent in their carrier accompanied by visionary status with positive thinking. Alike, the entrepreneurship education factor *instrumental readiness* is reported as the sixth most important one. The alternative ranking order is  $IR3 > IR2 > IR1$ . The budding entrepreneurs are saving their money from the college days to start their business in the future period. The factor *personal attraction* is reported as the least important factors among all

**Table 2** Satty’s nine-point scale for AHP (Satty 1994)

Intensity of importance	Meaning
1	Equal importance
3	Weak importance of one over another
5	Essential important
7	Demonstrated importance
9	Absolute importance
2, 4, 6, 8	Intermediate values between the two adjacent judgment

**Table 3** Respondents’ profile

Sl. no.	Respondents’ profile	No. of respondents	Qualification	Year of experience	Respondents’ gender		Marital Status	
1	M. Tech (IT, CS, ECE)	26	Post Graduate	0–3 years	Male	16	Unmarried	
					Female	10		
2	MBA (Finance, Marketing, HR)	26	Post Graduate	0–4 years	Male	14	Married	4
					Female	12	Unmarried	22

the considered factors in the present study. The alternative ranks in the following manner PA5 > PA4 > PA2 > PA1 > PA3. However, the personal attractiveness is reported as the least important factor, but the respondents are likely to be an entrepreneur and also believe in the liberal profession team building activity.

## 6 Findings

Combined AHP and TOPSIS method is employed for the development and prioritization of entrepreneurship education factors. AHP is applied to find out the weights of the factors, and TOPSIS is employed to find out the final rankings of the factors. Theoretical contribution of this study includes the development of theoretical framework of entrepreneurship education factors to identify their priorities, which help the national institutes for incorporating the entrepreneurship curriculum successfully. Findings of the study suggest that the diversity and heterogeneity of entrepreneurship education courses vary across the national institutes located in the northern central part of India. Many of the entrepreneurs are satisfied with the outcome of entrepreneurship curriculum being followed in their parent institutes, both in relative and in absolute terms. Additionally, they suggested that there is a need develop entrepreneurship curriculum in such a way that influences the entrepreneurial intentions among the professional and results in the start-up of an enterprise. Also, it is prerequisite to facilitate a mechanism by which budding entrepreneurs can have access to start-up capital, social network, and supporting information. Although a considerable number of students participated in the study,

**Table 4** Final Priority of factors of entrepreneurship education

S. no.	Main criterion (MC)	Priority vector (PV)	Subdimensions (SD)	CR	Priority vector	Distance from positive ideal	Distance from negative ideal
1	Entrepreneurial Intention	0.4851	Professional goal is becoming an entrepreneur (EI2)	0.076	0.2682	0.0154	0.0214
			Ready to make anything to be an entrepreneur (EI1)		0.2128	0.0144	0.0210
			Determined to create a firm in the future (EI4)		0.1745	0.0128	0.0207
			Make every effort to start and run my own firm (EI3)		0.1736	0.0133	0.0197
			Seriously thought in starting a firm (EI5)		0.1470	0.0120	0.0185
			Got the firm intention to start a firm some day (EI6)		0.1362	0.0113	0.0154
2	Subjective norm	0.4321	Family members consider me as an entrepreneur (SN2)	0.086	0.2457	0.0152	0.0220
			Get support from family and friends to start my own business (SN1)		0.2488	0.0149	0.0221
			Entrepreneurship as a profession would be accepted by close friends (SN3)		0.1756	0.0144	0.0211
3	Perceived behavioral control/self-efficacy	0.3846	Prepared to start a viable firm (PBC6)	0.064	0.2506	0.0179	0.0224
			Confident enough to succeed if I started my own business (PBC1)		0.2462	0.0185	0.0203
			Possess skills and capabilities required to succeed as an entrepreneur (PBC4)		0.2350	0.0162	0.0183
			Education would be the best way to start my own business (PBC3)		0.2321	0.0143	0.0162
			Easy for me to start my own business (PBC2)		0.2212	0.0132	0.0152
			Future planning carefully (PBC5)		0.2135	0.0124	0.0142

(continued)

**Table 4** (continued)

S. no.	Main criterion (MC)	Priority vector (PV)	Subdimensions (SD)	CR	Priority vector	Distance from positive ideal	Distance from negative ideal
4	Locus of control	0.3563	Intuitive decision making (LC3)	0.068	0.2432	0.0152	0.0132
			Creative problem solving (LC2)		0.2311	0.0143	0.0121
			Creativity (LC1)		0.1805	0.0133	0.0103
5	Need for achievement	0.3235	Being independent (NA3)	0.069	0.3238	0.0152	0.0165
			Vision (NA2)		0.2544	0.0148	0.0142
			Positive thinking (NA1)		0.2113	0.0128	0.0133
6	Instrumental readiness	0.3054	Saving money to start a business (IR3)	0.072	0.4323	0.0152	0.0254
			Spend time learning about starting a firm (IR2)		0.3162	0.0173	0.0230
			Intend to set up a company in the future (IR1)		0.2445	0.0122	0.0491
7	Personal attraction	0.2958	Be an Entrepreneur (PA5)	0.068	0.2553	0.0233	0.0182
			Liberal profession (PA4)		0.2373	0.0213	0.0172
			Team building (PA2)		0.2155	0.0188	0.0164
			Opportunity spotting (PA1)		0.1842	0.0151	0.0158
			Salaried work (PA3)		0.1726	0.0132	0.0141

the number of students who intended to be an entrepreneur was fairly limited. The findings have insightful implication for researchers, educational institutes, administrators, and government policy makers.

## 7 Implications for Theory and Practice

Significant empirical findings of the entrepreneurship education research evolved out from the present study. The findings of the present study would be used as the knowledge base in future study investigation and helpful in the development of the related areas. The significant implication indicates that postgraduate students in the area of entrepreneurship education do not match with actual outcomes regarding attitudes, knowledge, and entrepreneurial skills. This discrepancy results in changing of the entrepreneur’s perception for the present and future educational

needs. Present study is helpful in improving the processes that will bring entrepreneurial education at all levels of technical, managerial, and academic careers. Third parties and stakeholders will use this study as a benchmark to make available all the prerequisite facilities that will help them to sort out the better available choices regarding the education of future budding entrepreneurs. Taken into consideration of the significance and importance of entrepreneurship education in the national institutions, it is anticipated to reform the present entrepreneurship educational contents and system that encourage the creativity and innovativeness of students. The implication of the results is that educational institutes, administrators, and government policy makers should formulate case-based and project-based entrepreneurship education rather than having them run in parallel.

## 8 Limitations and Future Scope for Research

The sample of the study is restricted to the respondent's age ranging between 18 and 30 years. Postgraduation is the minimum educational requirements for the participation of respondents in the survey process. The respondents were mainly from the national institutes located in the northern central part of India. Furthermore, when prioritizing the factors of entrepreneurship education, we encourage researchers to consider subjective and non-income dimensions. These dimensions may drive entrepreneurship intentions. Consideration of private institutions along with the national institutes for the study may result in more generalization of findings. Present study reveals that there are substantial knowledge gaps in theory, methodology, and content that form the foundation for future research directions outlined above.

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# Chapter 5

## Curriculum Reform for Entrepreneurship Education: An Exercise based on Focused Group Deliberations

K. Kanagaraj and Joy Mukhopadhyay

**Abstract** This paper is exploratory in nature and an attempt to define and build a theoretical framework of curriculum for new-age entrepreneurs who do not have entrepreneurial background. This paper studies the various perspectives of the stakeholders (students, bankers, government administrators, academicians) on entrepreneurship education and consolidates their opinion. It also discusses some successful models of entrepreneurial education in the West, which are a part of their education system. The data collection was in the form of focus group discussion conducted at a senior academic level consisting of retired and working professors who have taught business administration at various levels. Focus group discussions were also carried out with established and budding entrepreneurs in Bangalore especially in small- and medium-scale enterprises. Inputs from bankers and students were also included as a part of the data collection. The results were compiled and the outcome was provided in the form of a curriculum with the time duration necessary for completing each course and the credit point associated with each course. The result can be used by any institute to develop and standardize a course on entrepreneurship.

**Keywords** Curriculum · Entrepreneurship education · Fear of failure · Stakeholder · Fund raising

### 1 Introduction

#### 1.1 *Entrepreneurship Evolution in India*

Traditionally, entrepreneurship has always been defined as establishing new businesses and to convert them into big corporations. In the Indian context, it is more of

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a family business that carries on for generations and evolving into new forms. The directors are usually the family heads. On the other side, large industrial corporations were established only by governments and were more of a public enterprises, very few private large-scale players were involved like the TATA's and the BIRLA's.

Most of the government enterprises were presided over by government-appointed directors who in general were IAS officers. In the private corporations, it was again governed by a board of governors. Most of them adopted the traditional models of entrepreneurship like the Consultant Model, Moon Light Model, Brilliant Idea model, and the Franchisee model.

All this went well until the technology revolution in the 1990's. The technology revolution in the form of internet revolutionized the term entrepreneurship. First time, we had players who had no political connections, no big business house to support them; just based on their technical skill, they were able to establish themselves as entrepreneurs in the form of dot com firms. Although many dot com companies busted due to certain deficiencies, many of them succeeded which inspired the next generation to follow their footsteps. Now the challenge was that many wanted to become entrepreneurs, but they lacked the necessary skills. Everyone thought that entrepreneurship was their cup of tea, and without proper evaluation, they jumped into the ocean, but not everyone was able to swim across, and many drowned; few survived, and very few succeeded.

## ***1.2 Entrepreneurship Education and Its Relevance***

The following is the gist of the aims of entrepreneurship education listed in the UNESCO report 2013 which primarily hold good for all countries. They are:

- Increase the awareness level of key stakeholders of entrepreneurship. There is a need for “enterprise creation” which is a feasible option for a career.
- The need to provide technical/vocational education to create more entrepreneurs.
- The need to develop “Entrepreneurial Characteristics” in an individual and the importance of giving right encouragement and guidance to become an entrepreneur. Acknowledge that not all graduates can become entrepreneurs.
- Entrepreneurship education is not about reading books or writing essays.
- Develop different strategies at different levels for different players using the above-mentioned methods to ensure that highest priority is given to entrepreneurship education.
- Give emphasis on developing innovation and skill development to identify, create, and manage successfully an enterprise.
- The focus of entrepreneurship education should not be only on students who take up vocational stream for higher education, but it is needed to target and motivate others also to take up entrepreneurship.
- Equal opportunity to all should be provided to enhance their skills.

- All countries have different needs, and there cannot be one model that can suit all countries.
- The aim should be to create an entrepreneurial culture and not limit education just to teach business skills and create an enterprise.
- Making of “Productive citizens” needs to be adhered to by empowering the students with the right skills and prepare them to respond to life including starting own business.
- Students studying entrepreneurship should be able to demonstrate entrepreneurship during their period of study as well.

### ***1.3 The State of Entrepreneurship Education in Europe (Extract from European Commission Report)***

The European commission conducts regular studies and for enhancing entrepreneurship. It has a strong belief that entrepreneurship should be an inseparable element of education. It has been proven through various studies that students who have received entrepreneurship education are more likely to become employable than others and also acquire skills to start their own firms. With this in mind, EC has proposed an action plan to expose and motivate students toward new business creation which in turn would create more jobs in Europe.

The following are some of the articles included in their Entrepreneurship 2020 Action Plan.

- It wants to increase cooperation within the EC community members and requests them to introduce entrepreneurship as a part of their education system.
- It encourages and supports public administrations to enhance their learning from success stories of peer administrations.
- EC wants a pan European education of entrepreneurship including a wide knowledge sharing, monitoring, impact analysis, and development of new techniques to enhance entrepreneurial culture.
- EC wants to associate with the OECD for guidance for developing a skeleton framework for the development and enhancement of schools of entrepreneurship. The same can be shared among member universities and exchanges should be encouraged between them to for enhanced learning.
- All the members are motivated to include ‘entrepreneurship’ as a competence into their respective educational curricula at all levels of education including higher and adult education by the end of 2015.
- It suggests hands-on experience before completing their compulsory education; a minimum of one entrepreneurial experience in the form of a project or managing an SME should be a part of curriculum.
- Increase entrepreneurial training for the citizens with resources with support of national job plans, and it should be used a tool for educating those who have not been a part of education or employment training.

- Participants in the national youth guarantee schemes should be provided with entrepreneurial classes.

#### ***1.4 The State of Entrepreneurship Education in USA: (Extract from the Survey of State Directors of Career and Technical Education 2012)***

The report confirms that entrepreneurship education is not dead and in a state of wellness in most of the USA, and lot of action is taken to enhance entrepreneurship as a career choice at the school level of different states. This report nails our belief that we educationists must accept that entrepreneurial skills are very important to the careers of all our students. Few states have taken a lot of leadership initiatives to ensure that entrepreneurship education is available statewide. However, many of them did not address the need of entrepreneurship education in the curriculum in the best of the many ways that it could have been provided. The state leadership has been constantly and consistently encouraged for including entrepreneurship competencies in all state level educational standards.

#### ***1.5 The State of Entrepreneurship Education in India***

The government has on its side initiated Entrepreneurship institute of India under Ministry of MSME, and it conducts various training programs to up skill the people in certain specific areas. It also has branches across India and organizes various conferences and other seminars to create awareness. Incubation centers are made available in premier institutions where budding entrepreneurs can make use of them and establish themselves.

#### ***1.6 Extract from the Knowledge Commission Report on Entrepreneurship Education***

The NKC study observed that for most of the entrepreneurial ventures, established from the start of this decade, are by either postgraduates or MBAs; however, the number of entrepreneurs who are just graduates has been on decreasing incline. This proves that professional education has gained importance among the new-age entrepreneurs. Since 2000, it has also been observed that many start-ups are MBA degree holders and have considerable work experience compared to pre-2000 era. This proves that entrepreneurs in this era want to gain formal work experience through formal employment before venturing into any new start-up. Statistically, of

the entrepreneurs interviewed, only 395 started their venture immediately after their education with no prior work experience. The median work experience of the remaining respondents (61%) was observed as 7 years.

The report also mentioned that, although entrepreneurship as a course has been introduced in a number of business school curriculum, there is still a definite need and extra thrust required in making that a priority subject. It also recommended that other entrepreneurship-related subjects such as Business Ethics, Early and Small Enterprise Management, Scaling Up of Business, Corporate Law, and relevant International Laws, should be a part of the curricula. A significant development is the establishment of school of entrepreneurship offering graduate and postgraduate programs at IIT Kharagpur (proposal stage). Such initiatives are to be encouraged and the same may be adapted in other educational institutions, including institutions based in non-metro areas. The NRI community and alumni networks should be used for funding such schools.

## 2 Review of Literature

Many models curriculums on entrepreneurship are available, According to Jurie van Vuuren and Gideon Nieman University of Pretoria, South Africa, discussing a possible curriculum for the training of would be and existing entrepreneurs results a very interesting debate. The authors developed an equation which states that final tendency to do something is dependent on or is a function of the strength of the motive to approach success ( $M_s$ ); to avoid failure ( $M_{af}$ ); the subjective probability of success ( $P_s$ ); of failure ( $P_f$ ); and the incentive value of success ( $I_s$ ) or failure ( $I_f$ ). The success incentive is positively related to the difficulty of the task. So the equation turns out to be  $I_s = 1 - P_s$ . They also said that  $P_s + P_f = 1$  and  $I_f = -P_s$ , then if the task is easier, the greater the humiliation at failing. The tendency to approach success is then defined as ( $M_s * P_s * I_s$ ), and the tendency to avoid failure as ( $M_{af} * P_f * -I_f$ ). They finally concluded that the tendency to execute a task  $T$  is the difference between the two tendencies.

Therefore,  $T = (M_s * P_s * I_s) - (M_{af} * P_f * -I_f) = M_s - M_{af}(P_s[1 - P_s])$ .

Baylor University's innovative individualized entrepreneurship curriculum model supported by the Entrepreneurship Living-Learning Program (ENT-LLC) created a housing option (something similar to incubation) specifically for fellow student groups with a common interest. It was called as BAN—Baylor Angel Network. The whole purpose was to build an entrepreneurial ecosystem where they can enhance their capabilities by using the available mentors, faculty, laboratories, and opportunities to interact with practitioners. It is a student run network that provides early-stage capital to young student entrepreneurs.

Honing (2004) discussed two models of entrepreneurship education: the experimental model and the contingency model. The first one lays emphasis on pedagogical aides like high-quality simulations which ensures real-time learning

environment. These simulations are to increase the analytical skill and promote confidence and motivation during the process of entrepreneurship education. This is said to increase the tolerance level for risk. These simulations come with a given set of solutions, but with attention to design, it can also incorporate new solutions that are yet to be discovered. For this, Hong gave an example of software that might be designed to include new solutions provided by players, using game administrator. The Federal School of Aviation follows. Old accidents and new accidents that can happen are fed into the simulator. Any good avoidance of accidents is also passed on; this helps in getting a possible solution from the players themselves.

In contingency model of entrepreneurial education, not only the traditional study and evaluation of elements of business plan is included but also promotion of new behaviors and new tools to increase reflective and longitudinal analysis is added. The concept of equilibration is used for entrepreneurship education by providing analytical tools along with experiential opportunity to links problems and answers with the environment. This model provides scope for reevaluation and iterative feedback opportunities. This is highly dynamic and dialectic in nature. Specific modules are taught to students pertaining to specific events contingent upon time and place. No hard and fast rules that any or all modules are finished before the start-up activities begin. This model tracks the business environment very closely and puts forth real challenges that the entrepreneurs will face. This increases their self-confidence and promises higher intellectual development. It is highly useful in the current dynamics of business filled with changes.

Doboli et al. (2010) proposed an entrepreneurial education model to be included in computer studies. The model was divided into two components (1) the breadth component (2) the depth component. The first one aimed at exposing students to general entrepreneurship especially in the area of computer studies by organizing seminars and by inducting modules of entrepreneurship in their regular programs. The second component was detailed for the students who wanted to take entrepreneurship as a career; for them, there was a detailed coverage, and it consisted of two programs called the option and the concentration. Although this model did not produce many entrepreneurs, it brought about large awareness among the students regarding entrepreneurship.

Muofhe and du Toit (2011) have said that education in entrepreneurship stream is a relatively new in the higher education sector in SA and in the African continent. They also have laid emphasis that entrepreneurship education is highly essential as the rate of unemployment is very high in the African region. Education needs to stimulate the new start-ups so that this unemployment problem can be managed. Their paper had analyzed the relation between entrepreneurial education, role models, and students' intention to choose entrepreneurship as a career, and it was observed empirically that there was a positive correlation. Their research also established the fact that the students who study entrepreneurship have higher chances to start a new business than a non-entrepreneurship student. It was also established that there is no differences on perceived behavioral control of entrepreneurship and non-entrepreneurship students. The presence of role model enhances their learning.

Ozgen (2012) discussed a new t-MBA model from Turkey. The challenges posed by entrepreneurship education had forced many educational institutes to design new courses one such was T-MBA (teenager MBA—MBA for the Teenagers) in Turkey. This was implemented by Doga schools where in entrepreneurship education was provided at the high school level. In this model, the eight competencies stated in the European Reference Framework of Key Competencies has been incorporated. (Sense of initiative and entrepreneurship, communication in their mother tongue, communication classes in any foreign languages, mathematical and basic competencies in science and technology, digital competence, learning to learn, social and civic competences, and cultural awareness and expression.)

The t-MBA model consists of different modules and is an adaptation of Michael Porter's Diamond Model in competition theory. The interaction between the modules is designed on the Porters diamond model. Cluster theory states that actors are close to each other spatially, and there is definite competitive edge. Accordingly, if the universities and entrepreneur's financial institute's suppliers are together in the same place geographically, there is definite scope of innovative and dynamic competition. In the porters diamond (four edged), the elements that constitute the edges of diamond are company strategies, local competition factor conditions and demand conditions, the related and the supporting industries, and the "chance" and the "state" which are the external factors. According to Porter, a cluster is a diamond functioning correctly. It is to be noted that not the components or elements, but their orderly arrangement is what creates competition. It also states that superiority arises from flow of information, cooperative competition and innovation.

The t-MBA education model has six components which form a similar diamond in the field of education. Four main components are the student councils, t-MBA academic program, international projects, and advanced foreign language education. The educational coaching and interdisciplinary relations are two supplementary factors. The way these components interact actually creates an atmosphere where the entrepreneurial skills develop and flourish. Management education is provided in classroom, and through student councils, they try to execute what they have learnt. They then implement this knowledge that they have gained through student council projects in the social responsibility projects in college. The student councils play a prominent role in building the skills in the students. The academic programs are standard programs like HRM that are taught in regular business schools. A plenty of seminars by prominent industrial people also has a significant impact as they take them as role models and learn from their decision-making skills. To add on, they also have vocational streams module for student aged 16–17 providing them hands-on experience. International language is taught to break the language barrier and international debates are held to enhance their knowledge. In brief, this model combines the theoretical knowledge with practice relating to entrepreneurship.

In a report submitted to the Tokyo foundation by the research team comprising of Jeffe Kee, Prathima, Sadarsana, and Jean Louis gave a well-defined curriculum



for the high-school-level students. The course was designed in the form of a workshop which allows creativity to flow and permits them to build their own products and market them. The curriculum and lesson plans have been designed in order to accommodate most of the schools. The final output of the research was in the form of two components: teacher guide and students workbook. The teacher guide tells the teachers as to how to progress throughout the workshop, and the students' workbook gives the students the list of activities that they need to do. The learning is through the workshop model that is mentored by the faculty.

The Arkansas state has a more defined curriculum for their high school children (grade 10–12) which consists of 60 h of sessions. It consists of five units. The first unit is “The world of Entrepreneurship” (10 h) where in the students are able to prepare a list of terms with definitions, do a personality profiling of successful entrepreneurs. Explore the opportunities and discuss them. Apply the analytical skills (mathematic) to describe and utilize effective resources. Encourage involvement in student business organizations, describe different economic systems, define the concept of supply and demands, and explain the effects of market structure and price and the government's effect on what is produced. The second unit titled “Planning a business” (10 h) covers advantages and disadvantages of buying an existing business, explains advantages and disadvantages of owning a franchise, explains advantages and disadvantages of a sole proprietorship, explains advantages and disadvantages of a partnership, explains advantages and disadvantages of a corporation, evaluates the different types of ownership, and determines which is best for the occasion, explains the purposes of a business plan and its importance, lists and understands the parts of a business plan, researches resources for your business plan. The third unit titled “Marketing of Business” comprises of listing the steps of market research: determine market potential, identify competition, explain the importance of choosing the proper location for a business (retail and non-retail), evaluate all aspects of potential facilities (physical layout, equipment, supplies, inventory), define marketing mix, identify the different elements of the product mix, describe the channels of product distribution, describe product pricing method, explain the forms of product promotion and selling, and explain the importance of marketing goal. The fourth unit is titled “Financial Management” 15 h, wherein students learn about understanding and preparing financial statement, list sources of loans and other assistance, identify various types of costs, discover how different types of costs effect the price entrepreneurs charge, identify the types of business record, compare advantages/disadvantages of computerized record keeping, discuss the types of financial statements prepared by business, describe methods of tracking/managing inventory, explain methods for managing cash flow, and discuss analyzing financial statements to determine financial performance. The last unit “Titled Human resource management” (10 h) covers importance of a job description and an organizational structure, lists methods for recruiting employee, describes the steps in hiring employees, discusses employee compensation plans, and analyzes methods for training, motivating, and evaluating employee. (Entrepreneurship I.pdf Retrieved from [www.ace.arkansas.gov](http://www.ace.arkansas.gov)).

Saskatchewan Learning, Govt. of Canada, had come up a program called Entrepreneurship 30 for college students. Entrepreneurship 30 is based on 100 h of instruction. This course in total consists of 11 core modules and 12 optional modules. The core modules are (1) Introduction to Entrepreneurship, (2) Case studies in entrepreneurship, (3) Entrepreneurial skills, (4) Seeking opportunities, (5) Business and Co-operative Development, (6) The Canadian and Saskatchewan Marketplace, (7) Market Research, (8) Initiating a Venture, (9) Planning a Venture, (10) Financing a Venture, and (11) Entrepreneurship and Career Choices. The optional modules include (1) International Trade and Entrepreneurship, (2) Defining and Accessing Resources, (3) Forms of Business Ownership, (4) Laws and Regulations, (5) Evaluating a Venture, (6) Entrepreneurship and the Internet, (7) Entrepreneurship for Aboriginal Peoples, (8) Entrepreneurship for Women, (9) Protecting Intellectual Property, (10) Work Study Preparation and Follow-up Activities, (11) Work Study, and (12) Extended Study. All these modules have a range of 3–15 teaching hours based on the choice of subject. The objective of this Entrepreneurship 30 curriculum is to equip and provide students acquire necessary knowledge and enhance their skills that are essential to conceive and start a new venture. It also appreciates the role played by entrepreneurs in the developing economy. There is a complete review of course work by the teachers after assessing the requirements and the resources available to teach. The pedagogy comprises of classroom instruction, computer-assisted instruction, community activities, and work sites.

Basu (2014) proposed the diamond framework which is a result of qualitative evidence from research and expert opinions, which assumes that the start of entrepreneurship alone as a major course has the capability to start and push the development and progress of a successful entrepreneurship education ecosystem, especially in the management graduates in India. This initiation in the short run would encourage the practice of entrepreneurship and will also enhance the overall knowledge abstraction. This shall be based on practice and research limiting to the specific upcoming economies. This creation of knowledge would be added to the pedagogical wealth, which would increase the efficacy of the course. This framework is designed in cyclical manner so that it retains its regenerative character. This would give rise to new theories of entrepreneurship. This model gives a lot to stress on introspection; thereby, the knowledgebase is continuously enhanced. This model works both ways in terms of pushing the entrepreneurial intent and pulling the strings of knowledge creation in order to enhance the business needs.

Rasmussen and Sørheim (2006) said that the traditional entrepreneurship education model has been indirect. It aims at individuals and tries to make them an entrepreneur. New theories of entrepreneurship encompass the role of opportunities and context (Shane 2003) and stress on hands-on learning by doing. By adding the formation of new ventures in the curriculum, a better match with the concepts of entrepreneurship can be achieved. This will also focus with the overall mission of economic development. Although there is no strict formulae for success, including a range of different activities within the classroom setting and employing the right resources would help these courses to succeed.

### 3 Objectives

1. To develop a model that can enhance the entrepreneurial capabilities of students through entrepreneurship education.
2. To propose a credible curriculum for entrepreneurial success.

### 4 Research Methodology

This being an exploratory paper the data was collected in the form of focus group discussions and semistructured interviews of successful as well as unsuccessful entrepreneurs, academicians, and researchers in the field of entrepreneurship. Data were also taken from research publications published in various academic and other journals.

To add on the information that was provided from not so successful entrepreneurs was extremely useful as it provided a lot of information on what could have been done to make their venture a successful venture.

The data were collated and a new theoretical model has been proposed.

### 5 Results and Discussion

As a part of the data collection exercise, we presented the existing MBA curriculum to bankers, government administrators, entrepreneurs and other stakeholders such as incubation space providers and asked them about their opinion, and the summary of the same is presented in Table 1.

#### 5.1 *The Perspective of the Entrepreneurs*

After interviewing the 21 entrepreneurs, we found that most of the entrepreneurs feel that the seed capital is a biggest road block for entrepreneurship. However, on the other side, government has so many schemes to fund entrepreneurs that by just looking at those schemes, it seems that this is probably not correct. When confronted with the same question, they replied that this is correct in theory, and in practice, getting capital from government sources is a herculean task. According to planning commission report 2012, “early-stage investing as a distinct class of investments is not formally recognized in India.” The number of regulations that India has, acts as a hindrance to the establishment of domestic venture funds investment as capital. Inefficient financial structures and no-exit policies prevent Angel investors from investing in India. Debt fund providers are not motivated to

**Table 1** Summary of discussion on the review of MBA syllabi

Bankers	Govt. administrators	Students	Academicians	Entrepreneurs
Curriculum lacks understanding of how banks view business	No inputs provided on Government schemes for seed capital	The subjects lack the concept of innovation	The IPR provisions should be a part of curriculum and including a practical course on that	No provisions for testing new models of business
No emphasis on various methods on repayment of loans	Does not include environmental laws and clearance forms associated with it	Syllabus is too lengthy	Modern business models are still missing in curriculum	Practical approach is missing in all courses
Lack of understanding of credit management	No procedural knowledge of export and import of goods	Lack of practice sessions		How to finance your venture is still missing in syllabus
No emphasis on credit or capital restructuring		No space to experiment during their course time		How to exit a business is never taught
		No emphasis on practice		It does not follow recent trends in business

fund emerging businesses although that has been declared as priority sector by government. VC's are regulated not to invest by providing debt. Mergers and acquisitions and IPO's are bound with extensive procedural compliance formalities. The government on its part provided seed capital through programs like TePP (Technopreneur Promotion Programme), proof of concept funds, and Technology Development Board (TDB). These are their but are available only after a lot of paperwork and procedures in various departments.

According to the World Bank "Doing Business 2012" Report, India ranks 132 out of 183 countries in ease of doing business. It goes on to state that establishing a new firm and securing construction permits are extremely difficult. In enforcement of contracts, India is at the bottom as it is extremely difficult to enforce contracts. This in turn deters first-generation entrepreneurs to establish enterprises as the cost and time of establishing the same is high and they may lose the first mover advantage of the business. Nevertheless, to say, exiting the business takes a much longer time. It is also mentioned that at the state government level, the policies and procedures are extremely complex and eat a lot of time.

**Proposition 1** *The problem of seed capital funding can be eliminated by providing a framework of obtaining funds right during the course of study.*

During the discussion and interview with the entrepreneurs, it was also observed and noted that fear of failure was also a major attitudinal hindrance in establishing a new business. This was observed to be very high in first-time entrepreneurs. Most of the failed entrepreneurs accepted the fact they did not have an exit strategy which is as important as entry, and they also told that if they had planned a proper exit strategy, then they might have started another venture.

The Gem's report on Global Entrepreneurship report 2012 says that risk taking can pose considerable challenges for potential entrepreneurs. It observed that the education system around the globe can only teach basics of entrepreneurship and enhancing their abilities to identify the opportunities for starting a business. But the major hurdle fear of failure remains unattended and unaddressed. There are different levels of fear such as bankruptcy and legislation. These can deter any new entrepreneur from establishing an enterprise.

The enterprise research center ERC in UK had conducted a major research titled "understanding fear of failure in entrepreneurship: a cognitive process framework" in June 2013, which acknowledged the fact that fear of failure is an important hindrance in entrepreneurial activity and they had suggest a few frameworks to overcome them.

**Proposition 2** *There should be an exit strategy in place to overcome the fear of failure in new venture creation.*

When posed with questions like did college education help you in establishing business, most of them said "no". There is lack of ecosystem which blends education with new venture creation.

The Planning Commission observed that the colleges and higher education institutions in India have been focusing on employment for their graduates in organizations of repute—government and business. It also pointed out that entrepreneurship is not promoted by educational institutions. This is also true for the premier institutes. Less than 5% of students from premier institutes start own businesses where as the global bench mark is 10%. There are no structured courses or programs in entrepreneurship in most of the institutes. There is severe lack of industry and entrepreneurial experience faculty in our educational institutions. There is lack of entrepreneurial ecosystem wherein businesses, investors, mentors, and alumni interact, innovate, and develop entrepreneurship. There are no provisions for sharing the best practices. The rate of success of incubators is mixed, and it has been observed that it is more driven by the faculty that any other factors such as operational and financial models. Adoption of best practices followed in countries such as the USA, Israel, and Brazil could help improve the functioning of these incubators.

## **5.2 The Bankers' Perspective**

The bankers were of the view that new-age entrepreneurs do not understand how bank view their businesses, and it was also stated the new business such as e-commerce delivery models were little complex to be understood by age old

banks. They also expressed that there was little understanding among new-age entrepreneurs on credit management and how to restructure debt. They were also not aware of the repayment mechanisms that creditors offered and often the banks had to intervene in this area.

### ***5.3 Views of the Other Stakeholders***

Academicians laid a lot of stress on IPR issues and other aspects related to that. They were also of the opinion that new-age business models were missing in the curriculum. It was observed that their opinions were more toward the delivery aspects of the curriculum rather than that of the curriculum itself. The government administrators felt that the curriculum did not have any of the initiatives that the government had taken for the development of entrepreneurship. They were of the opinion that the curriculum must have all details of schemes that can be made use by the entrepreneurs. The administrators also reflected the opinion that the know-how of certain procedures to obtain clearances and forms associated with them should be included. They also felt the need for including export and import procedures in the curriculum and the practicalities associated with it. The students who are the most important stakeholders of the entire education system expressed that the current syllabi is too lengthy, and innovation is nearly absent in any form; they felt that the curriculum restricted them from doing certain things that they would like to experiment. It was also opinionated that more of practice needs to be included in the system of education.

**Proposition 3** *An entrepreneurial ecosystem needs to be built within the education system to maximize the learning and practice.*

### ***5.4 Existing Successful Models of Entrepreneurship at University Levels***

The Stanford University Model is one of the most successful models as it is able to produce a lot of successful ventures which is either started by their students or alumni or faculty members. It also has well-defined structures and processes which promote focus on innovation and convert them into entrepreneurial ventures. The talent team comes from incredibly diverse set of students with varying levels of experience, economic, geographic, and cultural history. Close to 40–45% of faculty at their business school are industry practitioners, VC's, Entrepreneurs, and even the administrative staff comes with industry exposure. Two centers for entrepreneurship development have been exclusively established (Centre for Entrepreneurial Studies (CES) at the GSB, and Stanford Technology Ventures Program (STVP) at School of Engineering). At these schools, there are structured

programs for entrepreneurship, and they become the hub of all entrepreneurial activity. They tend to promote multidisciplinary research and industrial affiliate programs. Many industrial laboratories are also a part of their association. The Office of Technology Licensing has equity in more than 170 companies. There is strong network for mentorship and incubation. This has resulted in huge turnout of new-age entrepreneurs. In the class of 2011, there were 16% students who took up entrepreneurship as a career option. Some examples of start-ups from Stanford include Google, Sun, Yahoo.

#### **5.4.1 Harvard Innovation LAB**

It was established in 2011 with 30,000 square foot of space and is thoroughly encouraged and supported by alumni donations. It consists of high end classrooms, modern conference rooms, offices, and 5000 square foot of community event space. It is highly industry focused. It is there to serve all Harvard associates like students, alumni, employees, and faculty. It provides customized classes and connects with the local SME community. All kinds of subject matter experts are there for ex lawyers, tax consultants, etc.

## **6 Proposed Model of Entrepreneurship at Higher Education Level**

After deep consideration and taking into account all the above propositions and the successful models in the west, a new model for entrepreneurial education is proposed for enhancing entrepreneurial activity during higher education. This model is proposed for PG education only. A portion of the fees collected from students can be utilized as seed capital for promoting entrepreneurship among students. Institution can contact venture capitalists as well as seed funding agencies to support innovative ideas of students. These initiatives can motivate students who are interested to start their own venture.

In the first year (which is referred to as Foundation phase), institutes can focus on subjects like innovation, project management, business research methods, econometrics, and business law. In the initial stage, institutes can invite mentors from academic institutions and industry for giving the guidance for the students. During this phase, the student has to conceive his idea, revise and come out with a concrete business plan that has to be presented before a panel of experts consisting of funding agencies, mentors and Industry experts. If the panel approves it then the funding agencies will add to the reservoir of the fund that the student already has. If he fails to get approval, then he may just graduate as another MBA and move on to his corporate life.

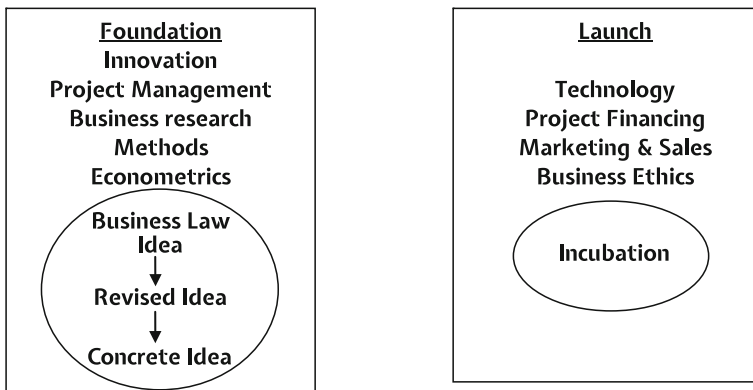
If he is successful, then he moves to the Launch Phase (second year) where a mentor is provided to ensure that he is on track. All the subjects in the launch phase are tailor-made for the success of the students dream project. This is essentially an incubation period where his business is incubated for a year and then decisions can be taken as how to move further.

It should be noted that the courses in the second year does not come with predefined syllabus. The syllabus should be designed by the student in collaboration with the mentors wherein sufficient exposure to his field of venture is provided. So there is no generic syllabus, and it is more of a self-paced learning with assistantship from mentors, and the contents of the course should be focused more toward the knowledge enhancement of his entrepreneurial venture.

### 6.1 The Merits of This Model

1. The course is entrepreneur friendly. The ideas can be converted into reality right during the early stage of life (during their study period) and even if they fail, it enriches their knowledge of business functions.
2. The number of people taking up entrepreneurship at an early stage is better for the society as it adds up to the economic development.
3. The number of people opting for entrepreneurship would be higher than in the traditional model
4. Fear of failure can be lowered as the model does not leave you empty handed, failure lands you up with an MBA degree from a reputed institute.

The following is a model curriculum for the new-age entrepreneurs:



**Innovation: 16 h of classroom + 16 h of Discussion (specific to their idea), 4 Credits** In this course, apart from the standard contents like introduction, the



process of innovation, organizational values that support innovation, product, and process innovation, it must contain and endorse intra- and multidisciplinary approach toward innovation. Case studies that focus on these intra- and multidisciplinary innovations must be discussed in detail. For example, the case of Uber diagnostics (a start-up firm) deals with product innovation which is highly multidisciplinary. The process innovation should be looked from the perspective of improving efficiency apart from reducing costs.

**Project Management (16 h of classroom + 16 h of Practice sessions)—4 Credits** This course can be on the lines of PMP certification encompassing the 5 domains of project management, i.e., initiation, planning, executing, monitoring, controlling and closing of project. It is important that during practical's exposure is provided on how to exit a project. Discussions should be based on real-time project executions for example the launch of a new operating system for desktops. Apart from these topics, special sessions should be included for conflict management and time management which are usually taken for granted. A separate session on credit management needs to be there for a detailed analysis by a specialist.

**Business research methods (16 h of Classroom + 16 h of Practicals)—4 Credits** In BRM the applications of data analytics along with their interpretations should be analyzed. Data mining tools such as SPSS may be used. Decision-making abilities should be enhanced using the outcome of the analysis.

**Econometrics: (8 h of Classroom + 8 h of Discussion)—2 Credits** In this course the applications of econometrics needs to discussed in detail. Many entrepreneurs are not at all aware of these tools and how they can be used in their business. It is helpful in determining the key success factors that are associated with their business models.

**Business Law: (8 h of class room + 8 h of discussion)—2 Credits** This should be specific in terms WTO regulations, economic regulations in different economies and their impact on business. The legalities of merger and acquisition, outsourcing regulations, tax heavens, transfer pricing, and import and export licensing procedures.

In the second year, all the courses are tailor-made adorning the needs of the project after a detailed discussion with the respective mentors. These courses are very specific to the business idea, and its primary focus is to enhance the capability of the entrepreneur to move the project out of incubation phase to a fully operational corporate business.

## 7 Future Scope of Research

This proposed 2-year curriculum is yet to be tested and refined and probably and new-age business school may try and implement this and further refine it as per the requirements of the stakeholders. The same exercises can be carried out in different

parts of the world specially in the developing and under developed countries and new models of entrepreneurship education can be evolved for meeting the demands of the respective places. In the long run based on feasibility, we can evolve a common model to a universal model for entrepreneurship education and propagate the same.

## 8 Limitations of This Study

The study is highly localized so it would not be appropriate to generalize this on a larger scale. The study is also time bound, and this implies that the courses in the curriculum would require a revision after few years. The study did not include parents of the first-time entrepreneurs and lawyers, and hence their views were not recorded. The Indian society being a highly collective society, and it would have been better if their views were also taken and recorded. During the study, when the data were collected, majority of the students were doing their MBA immediately after graduation; very few had work experience, and this may have influenced the outcome.

## 9 Conclusion

There are many models of entrepreneurship education throughout the world, and we have suggested this model based on our data collection and reasoning. This may not be the best model; however, it meets the current requirements of the system. This model is yet to be tested empirically on ground; however, in theory it is more practical as it takes care of all the propositions in the discussion. The authors firmly believe that for a developing country like India with its current economical scenario this model would throw open a lot of avenues of entrepreneurship. It takes care of the entire ecosystem that needs to be built for a successful entrepreneur. Even the failures in this model would have enough knowledge that at some point of time if they want to start a new venture they are well equipped with the necessary skills that an entrepreneur requires. The member nation of the BRICS would be left behind in the race of growth if none of the entrepreneurial ventures do increase substantially. MSME are next buzz word in the business circle, and the only way to add the number of MSME is through new business additions. If the education system can add entrepreneurs, it would be of the greatest value that education can provide to society.

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# Chapter 6

## Entrepreneurship Curriculum in Management Programmes: Benchmarking with the Curricula of Top International Universities

Az-har Basheer and M.M. Sulphey

**Abstract** Entrepreneurship is widely accepted as a catalyst capable of creating wealth and job. Many social scientists have established the success of entrepreneurship education (EE) in influencing students' entrepreneurial orientation and behaviours (Fayolle, *Int. J. Entrep. Small Bus.*, 2(1):89–98, 2005). According to the Strategic Framework for European Cooperation in Education and Training (ET2020), the main objectives of EE programme include creativity, awareness of students about self-employment and entrepreneurship as possible career options, working on concrete enterprise projects and activities, and providing specific business skills and knowledge of how to start a company. In the present study, the entrepreneurship syllabus provided in postgraduate management programmes of 86 universities/institutions from the four states of South India is critically analyzed, for its content. These syllabuses and pedagogies are compared for effectiveness with those of the top 10 international universities in the world. The comparisons revealed lesser importance to action learning, innovation management and new venture development in Indian universities' syllabus. It is suggested that a broad framework which includes the best practices and contents of top 10 universities and ET2020 objectives may be provided by bodies such as UGC/AICTE.

**Keywords** Creativity · Entrepreneurship · Entrepreneurship education · Management programmes · Self-employment

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## 1 Introduction

The world over entrepreneurship education (EE) is now considered as a stimulant for economic growth and a source of competitiveness (Arthur et al. 2012). This has made many governments to initiate policies that seek to encourage students to promote self-/small business employment as an alternative and viable career option. For instance, in countries like UK, graduates are encouraged to take up careers in self-/small business employment (Small Business Service—SBS 2002; Yorkshire and Humberside Regional Development Agency 2006). A number of social scientists have established the success of EE in influencing students' entrepreneurial orientation and behaviours (Fayolle 2005). Emerging economies like India also have a lot to gain from entrepreneurial culture, which can be attained only through EE (Timmons and Spinelli 2004). Towards this, a number of core academic courses, elective courses, entrepreneurship programmes, entrepreneurship degrees, postgraduate courses, etc. have been offered to foster entrepreneurialism (Collins et al 2004; Gatchalian 2010). Though the contents required for EE is derived from various business domains such as strategy, finance and marketing (Albornoz-Pardo 2013), most business studies courses that offer entrepreneurial studies are structured in such a way that focus is on increasing the awareness about entrepreneurship as a career option. It also strives to develop the understanding of the process of creating new business (Albornoz-Pardo 2013). The effectiveness of EE is dependent upon the type and design of materials and modes of rendering it (Arthur et al 2012). The present study aims to explore the syllabus and pedagogies followed for entrepreneurship in business studies, specifically in South India.

## 2 Entrepreneurship Education

Entrepreneurship education (EE) has been defined in various ways. Collinson and Quinn (2002) define it as 'preparing individuals for the creation and successful administration of profitable enterprise, thus contributing to the economy and regional development'. It is also defined as the interaction between the graduate as the product of university education and business start-up in terms of an individual's career orientation and mindset towards self-employment (European Commission 2003; ISBA Consortium 2004; Nabi et al. 2006). It can also be considered as equipping graduates to generate ideas and the skills and to make those ideas into reality. More recently, Mwasalwiba (2010) defined EE as a training process aimed at influencing individuals' attitudes, behaviour, values, or intentions towards entrepreneurship, either making it as a possible career or making appreciate entrepreneurial role in the society. They argue that, in addition to new venture creation, EE has to develop general competencies such as self-confidence, adaptability, risk assessment, creativity and specific business skills (European Commission 2010). It is often argued that the emphasis of EE should be on

entrepreneurial skill development. EE should be considered as an ongoing process rather than a mere traditional management course.

## ***2.1 EE in the Global Sphere***

In Europe, EE rose to the limelight in the early 2000s. Various policy decisions have been taken up by member states in European Union to encourage entrepreneurial culture and to include education and training for entrepreneurship. The initiatives from European Union include *Lisbon Objectives in Education and Training (2000)*, *Action Plan for Entrepreneurship (2004)*, *Oslo Agenda for Entrepreneurship Education in Europe (2006)*, *Education and Training 2010 Work Programme (ET2010)* and *the Strategic Framework for European Cooperation in Education and Training (ET2020)*. The Oslo Agenda for Entrepreneurship Education (2006) emphasized about the need for integrating EE in subject areas, having practice-based pedagogical tools, in collaboration with industry and business on imparting entrepreneurship education.

The focus of EE as identified through ET2020 includes creativity, awareness of students about self-employment and entrepreneurship as possible career options, working on concrete enterprise projects and activities, and providing specific business skills and knowledge of how to start a company. Thrust areas identified for EE are curriculum-based entrepreneurship education, extra-curricular activity for students in terms of developing entrepreneurship and university-based business start-up support for students and graduates (Institute for Small Business and Entrepreneurship 2004). Some of the suggestions put forward for providing an ecosystem that is conducive to entrepreneurship education include management by a central unit, EE being embedded in the curriculum as designed by subject specialists, including EE in the curriculum under another name such as ‘professional studies’ or ‘personal marketing skills’, providing career service in EE, supporting facilities such as incubators, boot camps, extra-curricular clubs and societies (Gibb 2005).

A classic example for extra-curricular engagement is Shell LiveWIRE, a community that offers networking, advice and a chance to win monthly and annual ‘grand ideas’ awards. Some of the examples for having effective EE in curriculum/pedagogy are embedding formal education and guided assignments to raise awareness about entrepreneurial opportunities, opportunity-centred learning and creative problem-solving aspects related to business, individual and group-based venture planning, innovation and design-based tasks, experiential and reflective contextualized learning, dissertations, projects and consultancy with external input and influence (Quality Assurance Agency for Higher Education 2012).

## ***2.2 Entrepreneurship Education in India***

The initial focus of EE in India was on encouraging self-employment and setting up of Small and Medium Enterprises (SMEs). Later, the focus shifted into designing

and delivering of various training programmes. This was done by various state and central government institutions such as National Institute for Small Industries Extension Training (NISIET), Small Industries Service Institute (SISI), Technical Consultancy Organizations (TCO), and Entrepreneurship Development Institute of India (EDI). In the 1980s, EE was offered in technology and management institutions, which were mainly faculty-driven courses. Simultaneously, the central government was also involved in setting up of Science and Technology Parks (STEPs) and incubation centres at a few reputed technical institutions. The previous two to three decades witnessed the entry of many institutions, industry associations, government initiatives, non-governmental organizations (NGOs), consultants, voluntary associations, etc. into the EE space. Another major step included offering core courses in management schools including Indian Institute of Management (IIM), Indian School of Business (ISB) and other leading private B-schools. This was followed up by the setting up of entrepreneurship development cells under National Science and Technology Entrepreneurship Development Board (NSTEDB), All India Council for Technical Education (AICTE), University Grants Commission (UGC), business and technology incubators at NSTEDB, various engineering colleges including Indian Institute of Technology (IIT), National Institute of Technology (NIT), leading private colleges and at various management schools. Though there are multitude of programmes and courses offered by various organizations, EE is plagued with innumerable problems. Some of these include cultural barriers, attitudes towards start-ups, incomplete entrepreneurship education, lack of standardized framework and high level of dependence on government (Rehman and Elahi 2012).

In India, the majority of the entrepreneurship-related courses are being offered in management institutions. In B-schools, EE is being made part of the course structure, mainly as elective. Reputed institutes such as IIM Bangalore have a dedicated entrepreneurship centre: the NS Raghavan Centre for Entrepreneurial Learning (NSRCEL-IIMB), which has a number of international collaboration projects with institutions such as London Business School and the Ewing Marion Kauffmann Foundation. IIM Calcutta provides practical-driven innovation and entrepreneurship activities, and also boasts in holding one of Asia's biggest business plan competition by the name *i2I*. Indian School of Business Hyderabad has a dedicated entrepreneurship development centre by the name Wadhvani Centre for Entrepreneurship Development, which is affiliated to a non-profit organization—the Wadhvani Foundation. The Centre is managed by several leading Silicon Valley entrepreneurs. It offers a diverse set of programmes, activities and facilities such as a New Business Development Project, an on-campus incubator, an Entrepreneur-in-Residence programme, field projects and a Young Entrepreneurs Club. Technical institutes are also supporting entrepreneurship education such as the Technology Business Incubation Unit Delhi, the SIDBI Innovation and Incubation Centre in IIT Kanpur and the Society for Innovation and Development (SID) at the Indian Institute of Science Bangalore. A recent trend is the offering of 'placement holidays' by institutes such as IIM Ahmedabad, IIM Bangalore and S.P Jain Institute of Management and Research, Mumbai (SPJIMR), where student participants can try

their hand into new business venture, and if things did no't work out in the next two years, can come back to the campus and opt for placements (Rehman and Elahi 2012).

### 3 Present Study

It is seen that the premier institutions in India are supporting EE by means of offering entrepreneurship-related courses, either as electives, separate entrepreneurship centres, incubation facilities, or consultancy projects. The question whether the institutions falling into Tier II and Tier III are providing EE is a matter of debate. This question assumes greater significance since the majority of the institutions fall into this category. The present study has been conducted among the traditional Tire II and Tire III business management institutes/universities from the four states of South India. Content analysis of syllabuses of both top 10 international universities in the world and the South Indian universities was carried out. Comparisons were carried out to understand the gap between the two. Comparisons were also made with regard to major elements of EE such as creativity, awareness of students about self-employment and entrepreneurship as possible career options, working on concrete enterprise projects and activities, and providing specific business skills and knowledge of how to start a company. These elements are globally accepted factors with respect to EE (ET 2020). The study also looked into how much entrepreneurship is integrated into the management studies curricula of institutes/universities in South India. Following aspects such as whether entrepreneurship course figures as part of the business—education curriculum; whether it is offered as a single, core or elective course; the basic pedagogy followed etc are also been discussed

The present study is only a macro-level study, which is carried out focusing upon the syllabuses of the top ten universities, and those of South Indian universities. A detailed micro-level study, involving the faculty and concerned students, will bring in more valuable results.

#### 3.1 Findings and Discussion

The study analyzed the MBA syllabuses of a total of 102 universities/institutions, out of which data of only 86 universities/institutions were found to be useful. The data were taken from state, central, deemed, autonomous and private universities/institutions. The researchers could gather data from only eight universities/institutions from Kerala, as the state is yet to open its higher education to deemed/private universities. The state-wise break-up of the institutions is provided in Table 1.



**Table 1** State-wise break-up of South Indian universities/institutions

	Name of the state	No. of state/central universities	Deemed to be universities	Autonomous/private institutions	Total
1	Karnataka	15	5	5	25
2	Tamil Nadu	16	19	1	36
3	Andhra Pradesh	11	5	0	16
4	Kerala	8	0	1	9
	Total				86

**Table 2** Data regarding universities/institutions offering entrepreneurship as core subject

	Name of the state	No. of state/central universities	Deemed to be universities	Autonomous/private institutions	Total
1	Karnataka	10	4	4	18
2	Tamil Nadu	8	13	1	22
3	Andhra Pradesh	8	2	Nil	10
4	Kerala	3	Nil	Nil	3
	Total				53

**Table 3** Data regarding universities/institutions offering entrepreneurship as an elective

	Name of the state	No. of state/central universities	Deemed to be universities	Autonomous/private institutions	Total
1	Karnataka	Nil	Nil	Nil	Nil
2	Tamil Nadu	3	2	Nil	5
3	Andhra Pradesh	Nil	1	Nil	1
4	Kerala	1	Nil	1	2
	Total				8

Some universities/institutes were offering entrepreneurship as core subjects while a few as electives. The data pertaining to this are presented in Tables 2 and 3.

It is worth noting that a number of universities/institutions were not offering entrepreneurship in their curriculum. Data pertaining to such institutions are presented in Table 4.

It could be found that only 61 out of the total of 86 universities/institutions were offering entrepreneurship as a core subject or as an elective. The remaining 25 universities/institutes were not offering entrepreneurship in any form in their business management courses. It is also seen that most of the universities/institutes offering entrepreneurship as a core paper have an average of 5 modules, with the maximum being 9. Universities/institutes offering entrepreneurship as an elective had maximum of 12 elective papers with the minimum being one. Notably,

**Table 4** Universities/institutions not offering entrepreneurship

	Name of the state	No. of state/central universities	Deemed to be universities	Autonomous/private institutions	Total
1	Karnataka	5	1	1	7
2	Tamil Nadu	4	5	Nil	9
3	Andhra Pradesh	3	2	Nil	5
4	Kerala	4	Nil	Nil	4
	Total				25

universities/institutes offering entrepreneurship as a core course were offering it either in the name of Entrepreneurship Development, Entrepreneurship and Project Management, or Entrepreneurship and Small Enterprise Management. Interestingly, a few universities were offering innovation as a separate subject—to be precise nine universities/institutions. Four of them were found to be offering practical sessions on innovation.

One of the objectives of the study was to compare the syllabus and pedagogies of the South Indian universities/institutes with those of top ten universities in the world. The top ten chosen were Massachusetts Institute of Technology (MIT), Imperial College London, University of Cambridge, Harvard University, University College London, University of Oxford, Stanford University, California Institute of Technology, Princeton, and Yale (top 20 universities 2014: QS World University Rankings). Content analysis of syllabuses/pedagogies followed in top ten universities was carried out, and best practices were identified. Comparisons were made with the syllabuses of South Indian universities/institutes. Comparisons are given in Table 5.

**Table 5** Comparison of best practices followed in top 10 universities in the world with those of South Indian universities/institutions

Best practices followed in top 10 universities in the world	Comparisons with South Indian universities/institutions
1. Offering entrepreneurship as an elective or specialization	1. Only eight universities/institutions were offering entrepreneurship as an elective
2. Offering innovation management in the syllabus as a subject	2. Only nine universities were offering innovation management in their syllabus
3. Thrust is given to new venture creation	3. Over emphasis given to small business management, rather than new venture creation
4. Importance to action learning, where students in final trimester/semester, students are required to synthesize the knowledge, skills acquired in the previous semesters into a real micro-business	4. None of the universities/institutions were found to be having such practices
5. Entrepreneurship boot camps organized as part of the syllabus	5. Entrepreneurship boot camps are nowhere mentioned in the syllabuses
6. Support from entrepreneurship development cells aligned with course syllabus	6. No such alignment found with course syllabus

A critical analysis of syllabus of these top ten universities revealed that all of them are offering entrepreneurship either as a specialization or as electives. This shows that all these universities are giving importance to entrepreneurship in their business management courses, similar to that of other specializations such as finance, HR, marketing or operations. Another notable factor is that all these universities offer innovation management as an elective.

Analysis also shows that new venture creation is also given thrust in entrepreneurship education in business management courses in these universities. Almost all these foreign universities give importance to action learning, and in the final trimester/semester, students are required to synthesize the knowledge, skills acquired in the previous semesters into a real micro-business, which they are expected to design and launch. It is clear that the emphasis of EE in these universities is to give practical exposure to students in starting and running new enterprises. Students are also given option to select courses such as art markets and entrepreneurship boot camp. As part of the course itself, students are given support from the entrepreneurship cells/centres of the respective institutions.

An analysis of the syllabuses of Indian institutions reveals that there exists a huge gap in entrepreneurship of business management courses, as compared to foreign universities. Subjects like innovation management are given lesser importance in South Indian universities. In India, entrepreneurship is offered mostly as a core subject, and lesser importance is given in offering it as a stream of specialization or as elective. This is contrary to that of foreign universities, where it is being offered as specialization or as elective. This reveals the level of opportunity provided to students to learn and explore more about opening new ventures, which is not the case in South Indian universities. Less emphasis is given to action learning in India, and more focus is on teaching students theoretical aspects such as project management, support on part of various agencies in entrepreneurship development and legal issues related to starting of new ventures. Students are seldom given opportunity to apply the theories, subjects and skills learned in the previous semesters to design and launch their ventures. Course syllabus is not designed to fill this requirement. Another aspect that is worth noting is that over emphasis is provided to small business management, than new venture development. Certain other areas found to be often repeated across cross section of the institutions include difference between micro, small, medium, large enterprises, and governmental support to small business management. The key point of new venture development is missing in most of the syllabuses.

The course syllabus/pedagogy of the South Indian universities was also compared with the ET2020 goals such as in cultivating creativity, awareness about self-employment and entrepreneurship as possible career options, working on concrete enterprise projects and activities, and providing specific business skills and knowledge of how to start a company. Comparisons are given in Table 6.

The analysis reveals a very different picture. As discussed earlier, only nine universities/institutions were only offering a course on innovation and creativity, that too lesser emphasis on cultivating creativity and innovative skills. The focus seems to be more upon teaching the basics of innovation and other aspects. Only

**Table 6** Comparison of ET2020 goals with those of course syllabus/pedagogy of South Indian universities

ET2020 goals	Comparisons with South Indian universities/institutes
1. In cultivating creativity	1. Nine universities/institutes were offering innovation management in their syllabus, out of which three were offering practical sessions in innovation
2. Awareness about self-employment and entrepreneurship as possible career options	2. Fifty-three universities, out of a total eighty-six universities were offering entrepreneurship as a core course
3. Working on concrete enterprise projects and activities	3. Major elements covered in almost all the syllabuses are theoretical aspects on feasibility study, preparing business plans. None of the Universities/Institutes seems to offer entrepreneurship related internship/summer projects
4. Providing specific business skills and knowledge of how to start a company	4. Theoretical inputs on legal issues related to starting a company have been emphasized, with practical exposure being minimal

three universities/institutions of the total 86 are offering practical session in innovation. The question whether awareness about self-employment and entrepreneurship as possible career options is offered in universities in India was also assessed. That 53 universities/institutes out of 86 are offering entrepreneurship as a core subject is indeed an encouraging sign. Though the students are given an opportunity to think about entrepreneurship as a career option, the question whether they have been encouraged to take up entrepreneurship is a matter of debate. The possible benefits of being a job provider rather than a job seeker are not stressed. Practical sessions are limited to guest talks, seminars, etc. The utility of such practices and their motivational effects are questionable.

The applicability of other goals of ET2020, such as working on concrete enterprise projects and activities, and providing specific business skills and knowledge of how to start a company, with respect to management courses in India is also assessed. It was observed that the focus in Indian institutions is on imparting knowledge about preparing business plans rather than giving hands-on experience about starting a new company. It is seen that almost in all universities/institutions' syllabuses, legal issues related to starting a company have been emphasized, with practical exposure being minimal. Same is in the case of preparation of business plans. Though the emphasis should have been on giving live projects in converting business ideas into reality, the syllabuses look the other way. Most of the syllabuses cover only components of business plan, contents, etc. One of the best practices followed in foreign universities in this regard is the opportunity to work upon live projects in the final year of study, where they are encouraged and supported to convert business ideas into real ventures. Support to incubation, though just catching up recently, is dismally low in Indian universities/institutes. Previous

studies also show that emphasis is only towards offering entrepreneurship as an extra-curricular or co-curricular programme in the majority of the colleges and universities in India (Shankar 2012). This definitely is hindering the growth of EE in this country. It is worth noting that a number of social scientists have established the success of EE in influencing students' entrepreneurial orientation and behaviours (Fayolle 2005; Timmons and Spinelli 2004). Further, a recent study by Arthur et al. (2012) has emphasized that the effectiveness of EE is dependent upon the type and design of materials and modes of rendering it.

## 4 Conclusion

Emerging economies such as India have to promote and develop effective EE systems in order to achieve its economic goals. There is an urgent need for having a uniform approach in integrating EE into the business management studies across different universities/institutions. Important aspects such as developing entrepreneurial traits, working on real-life projects, exploration based upon innovation and creativity seem to be missing in most of the university syllabuses. The thrust areas for EE in India should be on innovation and creativity, which are not emphasized in most syllabuses in management studies. The other pertinent questions are whether EE should be focused more on other areas such as science and technology rather than on business management studies, where innovation and creativity could be more emphasized is a matter that need be debated.

In the Indian context, most institutions have entrepreneurship development (ED) cells/centres. However, the majority of them exist for namesake, and its role not clearly defined. Most of the time, the activities of ED cell and the course requirements seem to be different, and both tend to act parallel. It is high time that the goals of ED cells are clarified and are made in tandem with those of the courses/syllabuses. The same has been emphasized in previous studies (Dutta 2012). A more focused approach is sure to bring in better tidings. The present study thus established the need for more action learning-oriented courses, and the ED cells/centres could act as a supporting mechanism. A supportive ecosystem with an entrepreneurial culture is the need of the hour. It is highly imperative that different stakeholders such as entrepreneurs, governmental and non governmental agencies supporting entrepreneurship, also get involved in designing the entrepreneurship course and its pedagogy. It is high time that adequate motivation and opportunities are provided to students to explore their innovative business ideas and make them feasible during their studies itself. Teachers who are also part of this ecosystem need to be trained in EE, and only teachers with real passion in entrepreneurship should be entrusted with the responsibility of running entrepreneurship-related courses. There is a definite need for initiative elective courses in entrepreneurship. Another area that can be emphasized in EE is intrapreneurship. This is the need of the hour, since only those executives with such a mindset can drive positive changes within the organization (Norasmah and Halimah 2007; Hisrich et al. 2005).

A workable solution for all these is to develop entrepreneurship as a foundation course that covers the managerial aspects of new ventures, working in start-ups, new projects, etc. Electives on entrepreneurship may be offered in the third and fourth semesters, as an option for students who are interested in specializing in it. The overall focus should, however, be upon developing entrepreneurial mindset and spirit, rather than thrusting entrepreneurship as an alternative for being executive. This will go a long way in moulding those students into real entrepreneurs who would be capable of contributing towards nation building. Only then can we claim that the dreams and aspirations of this mighty nation have been turned into reality.

### Annexure 1: List of South Indian Universities/Institutes

SI. No	Karnataka	Tamil Nadu	Andhra Pradesh	Kerala
1.	Alliance University	Alagappa University	Acharya Nagarjuna University	Asian School of Business
2.	Bangalore University	AMET University	Andhra University	Cochin University of Science and Technology
3.	Central University of Karnataka	Amrita Vishwa Vidyapeetham	Dr. Ambedkar University	Kannur University
4.	Christ University	Anna Institute of Management	Dravidian University	Kerala Agricultural University
5.	Davangere University	Anna University	Gandhi Institute Of Technology and Management	Kerala University of Fisheries and Ocean Studies
6.	GITAM University	Annamalai University	IBS University	Mahatma Gandhi University
7.	Gulbarga University	Avinashilingam University	Jawaharlal Nehru Technological University, Anantapur	National University of Advanced Legal Studies
8.	Jain University	Bharat University	K L University	University of Calicut
9.	Karnataka State Women's University	Bharathiar University	Krishna University	University of Kerala
10.	Karnatak University	Bharathidasan University	Rayalaseema University	
11.	Karnataka State Open University	B.S. Abdur Rahman University	Sri Krishnadevaraya University	

(continued)

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SI. No	Karnataka	Tamil Nadu	Andhra Pradesh	Kerala
12.	Kuvempu University	Dr. M.G.R. Education and Research Institute	Sri Padmavati Mahila Visvavidyalayam	
13.	Mangalore University	Gandhigram Rural Institute	Sri Sathya Sai University	
14.	Manipal Academy of Higher Education	Hindustan University	Sri Venkateswara University	
15.	M.S. Ramaiah University of Applied Sciences	Indian Maritime University	Vikrama Simhapuri University	
16.	Mysore University	Kalasalingam University	Yogi Vemana University	
17.	PES University	Karpagam University		
18.	Presidency University	Karunya University		
19.	Rani Channamma University	Madurai Kamaraj University		
20.	REVA University	Manonmaniam Sundaranar University		
21.	Tumkur University	Meenakshi Academy of Higher Education and Research		
22.	University of Mysore	Mother Teresa Women's University		
23.	University of Agricultural Sciences	Noorul Islam University		
24.	Vijayanagara Sri Krishnadevaraya University	Periyar University		
25.	Visvesvaraya Technological University	Periyar Maniammai University		
26.		Prist University		
27.		Sathyabama University		
28.		Saveetha University		
29.		Sri Chandrasekharendra		

(continued)

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Sl. No	Karnataka	Tamil Nadu	Andhra Pradesh	Kerala
		Saraswathi Viswa Mahavidyalaya		
30.		SRM University		
31.		Tamil University		
32.		Thiruvalluvar University		
33.		University of Madras		
34.		Vels University		
35.		Vinayaka Mission's Research Foundation		
36.		VIT University		

## Annexure 2: List of Top 10 Universities in the World (Top 20 Universities 2014: QS World University Rankings)

1. Massachusetts Institute of Technology (MIT)
2. Imperial College London
3. University of Cambridge
4. Harvard University
5. University College London
6. University of Oxford
7. Stanford University
8. California Institute of Technology
9. Princeton University
10. Yale University

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## Chapter 7

# A Brand Called ‘YOU’: The Essence of Managing Your Image as an Entrepreneur

**Kuiljeit Uppaal and Manju Singh**

**Abstract** Education and human development are in conjunction with the dynamism of the contemporary world. The education system has sensed the need to churn out young entrepreneurs in order to drive the economy forward at a significant pace, and today entrepreneurship development is headway with a host of technical subjects. However, it is imperative to recognise that the entrepreneur is first and foremost, a brand on his/her own accord, even before he/she projects his/her company. One’s image is crucial in the advancement of his/her venture and life at large. In today’s competitive world, one has to stand out amidst the multitudes, personally as well as professionally. Technical know-how is not always enough as a professional. One needs the winning edge! Image Management concretely leverages one’s position on the ladder of growth, success and recognition as well as aspirations in the vitality of the contemporary world. Thus emerges a weighty need for the incorporation of the study of Image Management in the education system for every budding entrepreneur. Ironically, the education system has yet to recognise and explore this area. The paper recognises this need and attempts to conceptually bridge the gap by bringing forth the relevance, purpose and utility of Image Management.

**Keywords** Image Management • Entrepreneur • Education • Skills

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## 1 Introduction

In today's rather competitive world, survival itself has become very challenging. Every individual is out to prove himself/herself not only worthy of existence but also as one of 'the best' professionally, amongst the millions that surround him/her. In the quest to do so, an individual aspires to be exemplary in technical skills for professional growth and accolades. Entrepreneurs are significantly affected in this race of proving themselves laudable in the journey of their careers even more so since their professional mettle and networking prowess are continually challenged by the world at the drop of the hat! However, one wonders whether these entrepreneurs are actually ready and prepared for the challenges posed at large, or do they lack the skills that will give them that boost in life professionally and personally. Research suggests that today higher education has introduced courses and curriculum to prepare young entrepreneurs for their careers ahead. Subjects such as entrepreneurial processes, risk taking, product development, computers for business, economics, franchising, venture capital financing and various aspects of small business management are part of the syllabi amongst others. However, quite akin to other fields of higher education in India, one witnesses a flurry of such subjects and predominant focus on the development of cognitive skills alongside an absence of image management and a 'name sake' presence of soft skills, which students sail past in a couple of theoretical classroom sessions or even through correspondence. Here, surfaces the question whether young entrepreneurs aspiring to make it big on the domestic as well as global platform actually realise that they are the front face of their organisations that portray the image of the organisation, and hence, managing their 'own image' is imperative for growth and success.

The post-liberalisation industrial and economic scenario in India makes it vital that a more dynamic and realistic approach is needed to create the right kind of entrepreneurs who are not only technically skilled but also socially conditioned and can present themselves with great poise and elan, immaculate verbal skills, splendid etiquette and manners, good sense of clothing and grooming and most importantly with a high level of self-concept. Ironically, the Indian higher education system does not seem to have catered for the same. It is probably time we revisit and introspect our higher education system and look for some answers which would help not only in tackling the problem of unemployment but also in the growth of new entrepreneurs.

## 2 Literature Review

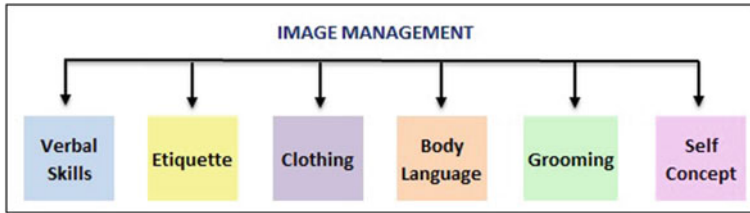
Education has come to centre stage and is today the most important instrument for evolution, alteration, advancement and development. However, ironically, the higher education system in India has resisted change for almost a century (Kulandai Swamy 2003). On the other hand ironically, the West makes progression in

alignment with the needs of an organisation. (Nigavekar 2005). In the age of knowledge that we are in, any kind of structural rigidity or insufficiency in the education system shall impact the millions of students who prepare themselves for employability or entrepreneurship ahead in life. Unfortunately, the Indian higher education system has been experiencing a plethora of deficiencies such as rigid academic build-up, poor faculty, outdated teaching methods and ethnic imbalances amongst a host of other challenges that has catapulted unemployable graduates and a significant quantum of youth grappling with plain technical skills and know-how, but lack of persona and image. (Agarwal 2009a, b; Powar 2002; Nigavekar 2005).

Ironically, in FICCI's Summit 2013, Vision 2030, it was brought out that India is slated to be one amongst the youngest nations in the world by the year 2030 (Higher Education in India: Vision 2030, Summit 2013). This means that one out of four graduates in the world will be an outcome of the Indian higher education system, of the 140 million students that are in the college-going age bracket. Some of these youth would look at employability as an option while the others will possibly opt for entrepreneurship. The current education system is already facing challenges on various accounts, and until we alter the education model and curriculum significantly, we will find a shortage of good manpower being churned out from the system. For instance, as Dana (2001) brings out that the state supported entrepreneurship development programmes (EDPs) in India are generally localised as well as offered to a restricted number of people, they offer limitations because of which India finds it hard to fulfil the need for a large number of potential entrepreneurs across the geography of the country. This shortfall also has a drastic impact on the GDP of the country since entrepreneurs are a contributing segment that put their energy and resources to a productive use and generate revenue for the economy.

While Dana (2001) also suggests interestingly, the literature goes to hint that there is no definition of entrepreneurship or entrepreneurs that is accepted universally, and entrepreneurs could be either born or made depending on the two schools of thought Schumpeterian or Kirznerian. Various environments in Asia including India follow the Kirznerian thought and believe that an entrepreneur may identify an opportunity for profit rather than create one. The lacuna in the Indian educational system does not always encourage entrepreneurial thought, innovation or creativity. Despite being achievement oriented as a society which ideally should be characterised by innovative and enterprising individuals, India falls short on social conditioning and self-confidence of individuals on a global platform. Entrepreneurship competence and social competence can have an influence on business network, business performance as well as competitive advantage (Mohebi and Farzollahzade 2014).

Formal learning and technical know-how seem to be the areas of focus to make sure that technical skills are well embedded in young entrepreneurs-to-be. In a globalised economy, the adeptness and capability of manpower has to meet global standards, and thus, core curriculum has to meet national requirements and global challenges (Bassett and Maldonado 2010; Gardiner 1994; Goteti and Kadavakollu 2013). In other words, the emphasis of education in the current sense has to evolve to the inclusion of elements that deal with the development of the 'self' which shall promote individuals and entrepreneurs to face life and its harsh challenges more successfully.



**Fig. 1** Elements of Image Management

A study of image management in entirety shall aid movement into facing the current situation with more dexterity and ease. Unfortunately, there has not been any significant academic work in the area since it is a relatively new concept. However, one traces literature on individual elements of the concept. Image management consists of six elements or variables i.e. Verbal Skills, Etiquette, Clothing, Body Language, Grooming and Self Concept that have been expressed by various experts Rasband (2001), Jobity (2010), Jones and Van Hool (2004), Schuh (2009), Mitchell and Corr (1998), Herskovitz and Crystal (2010) in more than a few angles, and it is quite fascinating to note their significance in determining and influencing the crux of a personality. The elements of Image Management have also been derived using Interpretive Structural Modelling (ISM) and Matrice d'Impacts croises-multiplication appliqué an classment (MICMAC) Analysis that are entwined with significant interrelationships and envelope the gamut of Image Management (Uppaal and Singh 2016).

The six elements of Image Management have been represented visually in Fig. 1. The image of a person is a crucial factor for the growth and progression of an individual in the challenging world of today. The epitome of an entrepreneur's persona is deficient without the core elements and vice versa. The genuineness, appeal and impact of an individual's image emerge to the surface from these variables in terms of self-acuity as well as by people's observation. The exterior and inner aspects of an individual are the true constituents of the person's image and contribute to being the brand one desires.

### 3 Discussion on the Essence of Image Management

The well-known image management expert Judith Rasband explains Image Management as a continuous process of appraising and organising the effect and bearing of one's appearance on one's own self, others and on the attainment of one's goals. It is based on the knowledge of ocular design and on the language of semiotic non-verbal communication through an individual's dress, grooming, body language and etiquette. It requires understanding of the corporeal, psychological, societal and artistic aspects of image as applied to a person in ingenious and practical ways.

*Verbal Skills* are universal in nature, apart from being the simplest channel of communication. What words are chosen to be used, how words sound to us and how the words are actually used equally contribute to an individual's verbal skills, since they project the level of sincerity, sensitivity and openness in communication. Expressing oneself as a brand is critical in making an impact as well as an impressive presence. From the language one uses with the tone of formality, to presentation and planning of one's outfit, it is imperative to bear in mind their importance for easy adaptability with masses and various environments. Entrepreneurs are leaders who need to highlight their ability and maximise themselves as brands by the use of apt and correct words, in order to create an impact and attain success (Misteil 2010; Jones and Van Hool 2004; Quilliam 2003; Mehra 2012; Carnegie 2011).

*Etiquette* is a set of guidelines that one is encouraged to follow daily, in order to project a polished personality as a professional. These guidelines are socially accepted manners that must be adhered to, at all times and various situations, to bring accord and synchronisation into our own lives as well as others. Individuals must be aware of the right etiquette in various scenarios and use them constructively with people from across the world, thus helping them achieve greater success in projecting a positive image. A shabby appearance, absence of eye contact, sloppy dining manners, wet handshakes and negative expressions amongst others create a shoddy and bad impact on others. Making others comfortable and respected is crucial in presenting the right image and courtesy in social bonding and interactions. Mastering etiquette with all its nuances is very necessary for entrepreneurs as business alliances and networking can be hugely impacted in the absence of the same (Sabath 2010; DuPont 2009; McPherson 1998; Bye 2011; Seitz 1992; Lizandra 2010; Gulati 2010; Mehra 2012).

*Clothing* impacts our appearance significantly in the way one feels, one acts and one thinks to which people then react and respond. Packaging oneself like a product with the right kind of attire, accessories and styling can say a lot about an individual. Clothes can speak a language of their own, and entrepreneurs need to communicate distinct messages for positive outcomes. Clothing largely enhances one's image and includes the colour, shape, size and fit along with matching accessories and footwear appropriate for various occasions. Carrying one's clothes with grace and élan is extremely important to be respected and acknowledged in terms of authority and status. Since 55% of the impact of a message is attributed to appearance and body language, it is vital to understand its relevance in making a positive impression on others, especially in critical meetings, presentations or job hiring. The colour of clothing is also known to have a reflective effect on our thoughts and mood, because of which it is one of the most important aspects of dressing for growth and success. Clothing and colour reveal a person's personality which can represent multiple messages to others. Hence, clothing should be used tactically and in a well-planned manner to project the right 'you', especially as a leader and an entrepreneur (Hyams 1967; Molloy 1975; Mehrabian 1972; Jones and Hool 2004; Seitz 1992; Jobity 2010; Jackson 1985; Do and Lee 2013; Peluchette et al. 2006; Cho 1986).

*Body Language* is a very powerful and highly used means of communication that can influence and impact our communiqué with the world. It includes facial

expressions, posture and gestures, body movement amongst other forms of non-verbal communication. Body language exposes an individual's attitude and nature, even in the absence of words, since gestures or facial expressions show strong emotions and attributes of a person. Even when speech did not exist, body language did and was used as a primary mode of communication. Positive body language can alter and change many things about an individual and convey positive signals to others and thus make the individual more likeable and preferred. Entrepreneurs need to understand and master the use of body language in order to substantially give themselves a position of advantage at work, socially and for success on all fronts (Pease and Pease 2012; Misteil 2010; Gupta 2009; Pease and Pease 2005; Mehrabian 1972).

*Grooming* is the embodiment of packaging the brand of an individual. It envelopes hygiene, neatness, elegance and effort in providing the immaculate look to an individual's personality. A well groomed person sends out encouraging signals and draws in attention like a magnet. He/she also successfully evades a diminished presence in a group of people. Good grooming is an essential part of the image building of an individual as well as a sustained image in society. Be it the hygiene, fitness and care of skin, hair or nails, every individual must ensure adequate attention towards creating an affirmative impact for acceptance by society. Make-up, which is an integral part of grooming, raises one's self-esteem and self-worth and thus helps to generate positive affirmations about oneself. Grooming gives the finishing touch to an individual's personality and aura and brings him/her to a state of acceptability and attention at large by people in the gamut of activities (Jones and Van Hool 2004; Jobity 2010; Liu et al. 2012). Grooming techniques should be religiously followed through by entrepreneurs on a daily basis for enhancing his/her image and persona.

*Self Concept* refers to how we think about, as well as evaluate ourselves. In other words, it relates to the individual's belief about himself/herself, including the person's attributes and who and what he/she is. In doing so, an individual becomes aware of oneself and thus has a concept about oneself. Interestingly, various inputs have emerged from experts about self concept. While some refer to it as an amalgamation of self beliefs about one's own attributes, others have brought forth the breadth of the subject and highlighted the levels of development of self. From the basic level of body image which may be acquired from as early as childhood, to self image, self esteem, self confidence, self competence and self actualisation of one's goals, the entire journey of development though life is extremely critical for an enhanced personality and image of an individual. Self Concept helps to put aside our insecurities and fears and helps us to converge on our positives and make us more confident and responsible individuals. It helps to understand the concept of living with some imperfections and easy acceptance of the same. A positive self concept, which includes the inner and outer self, enriches and endorses social acceptance and overcomes barriers of all kinds in one's realisation of goals. (Rogers 1959; Pastorino and Doyle-Portillo 2013; Weiten et al. 2012; Baumeister 1999; Garner 2012; Khera 2012; Rasband 2001; Gupta 2009; Schuh 2009).

## 4 Discussion on Learning Outcomes and Pedagogies for Image Management

In order to determine the pedagogies for a knowledge area, one needs to essentially ascertain the desired learning outcomes for the same. By and large, a learning outcome is what an individual comprehends and thus develops the capacity to appreciate and possibly utilise the knowledge shared, as an upshot of learning or after some form of knowledge engagement. (Gonçalves et al. 2013; Allan 1996; Otter 1992; Eisner 1979). Bloom's taxonomy of learning domains broadly categorises learning outcomes into three domains, which are cognitive, psychomotor and affective spheres of learning (Bloom 1956, 2006). The three domains together cater to the holistic learning for an individual. The taxonomy created by Bloom is a well recognised and acknowledged one across the globe and has also been a platform to give rise to many more theories in the area as well as taxonomies linked to learning outcomes for all three domains (Krathwohl 2002; Airasian et al. 2001; Anderson et al. 2000; Simpson 1972). The Cognitive domain refers to the intellectual skills of an individual, in other words proficiencies related to knowledge, comprehension, application, analysis, evaluation and synthesis. The Affective domain relates to the way individuals operate their lives with regard to various emotions, feelings, values and attitude. Thus, the outcomes that emerge in this domain include receiving phenomena, responding to phenomena, valuing, organisation and internalising values. The Psychomotor domain deals with corporeal aspects and physical movements and the skill of coordination. The outcomes related to this domain include perception, set (whether physical, mental or emotional), guided response, mechanism, complex overt response, adaptation and origination.

Keeping in mind the dynamism of the world and the changing trends, it is imperative to embrace an all-inclusive approach to learning and education. Inclusive learning and development cannot ideally happen through a myopic and singular approach of cognitive knowledge only, but also by the amalgamation of other learning domains (Allen and Friedman 2010; Gardiner 1994). The outcomes and levels of learning on the platform of the three domains need to be determined and employed in relation to the image management of an individual. Table 1 highlights the learning outcomes for image management derived from Bloom's taxonomy.

In order to extend and bridge the gap between the employability requisites of industry and what higher education in India provides, Image management needs to be looked at very seriously and incorporated into the learning process and preparation for employability and entrepreneurship. The six elements of image management can be individually drawn into broad learning outcomes on the basis of Bloom's taxonomy which are pertinent to the needs of the current global scenario and imperative for students of higher education to assimilate. These may be bracketed under the personal qualities of employability skills by prospective employers as relevant to the industry whether primary, secondary, tertiary, quaternary or even quinary. Table 2 elaborates the set of learning outcomes for every element of Image Management.



**Table 1** Learning outcomes for Image Management

Cognitive	Knowledge
	Comprehension
	Application
Psychomotor	Perception
	Set
	Guided response
	Mechanism
	Complex overt response
Affective	Receiving phenomena
	Responding to phenomena
	Valuing
	Organisation
	Internalising values

The diverse nature of the subject matter of image management urges the need to explore multiple methodologies that include experiential learning and relatively lesser elements of didactic learning. For example, verbal skills, body language, etiquette, clothing and grooming are the subjects that require to be instructor-led training (ILT) based and theoretically taught and demonstrated through classroom instruction and interaction, simulation, role plays, modelling, case studies, etc. followed by practical sessions of the same that stimulates multi-sensory learning and mind expansion. That apart, involvement of cooperative learning helps learners to work as individuals as also a team and promotes cross-cultural understanding, listening and speaking skills and non-verbal communication (Grossman 2005; Beard 2010; Slavin 2012; Kagan 1989; Blom and Saeki 2011; Kompf and Bond 2001; Christian 1999; Karseth and Sivesind 2010; Gundem 2000). Self Concept involves shades of experiential learning wherein parts of service learning techniques can be employed to understand, evaluate and control one's personal and professional self (Miley et al. 2012; Williams and Reeves 2004; Goldstein 2001; Weah et al. 2000; Schloemer 1999; Gibbs and Gambrill 1999; Gray et al. 1999; Tucker et al. 1998). Interestingly, National Institute of Adult Continuing Education's (NIACE) Equalities Toolkit refers to ten pedagogical approaches that include cooperative learning, experiential learning, differentiation, relating theory and practice, assessment for learning, using e-learning and technology, learning conversations, multi-sensory learning, modelling and embedding language, literacy and numeracy which are specifically flavoured towards equality and diversity and may be considered, if required. The inclusion of Image Management as a subject of higher education brings in a huge advantage to the students at all levels, who desire to opt for entrepreneurship or employability.

Despite being achievement driven as a society, which ideally should be characterised by novel and inventive individuals, India falls short on social training, societal conditioning and self confidence of individuals on a global platform. There is a need for preparation for an independent society as part of education with the enclosure of aesthetic areas, persona and interpersonal skills. Personal competence and social

**Table 2** Learning Outcomes of the six elements of Image Management

Elements of Image Management	Learning Outcomes
Verbal Skills	<ul style="list-style-type: none"> <li>• Learners should be able to display understanding and confident use of correct language and diction, accent, intonation and voice usage in greetings, interpersonal communication and public speaking</li> </ul>
Etiquette	<ul style="list-style-type: none"> <li>• Learners should be able to appreciate and demonstrate confident use of various of types of etiquette in various situations and display cordial and harmonious behaviour</li> <li>• Learners should be able to be sensitive towards individual and cultural differences in lifestyle, clothing, language, customs, manners, etc</li> <li>• Learners should be able to display competence in business etiquette and dining etiquette</li> </ul>
Clothing	<ul style="list-style-type: none"> <li>• Learners should be able to display understanding and confident use of correct and appropriate clothing for body type and occasion showcasing balance between freedom and responsibility in dressing</li> <li>• Learners should be able to demonstrate the use of correct line, shape, colour, texture, pattern in clothing and styling and the ability to manoeuvre combinations</li> <li>• Learners should be able to display good understanding of colour wheel and cluster clothing</li> </ul>
Body language	<ul style="list-style-type: none"> <li>• Learners should be able to display understanding and confident use of positive body language in various scenarios</li> <li>• Learners should be able to assess and respond to others and their territorial needs with positive body language</li> </ul>
Grooming	<ul style="list-style-type: none"> <li>• Learners should be able to display understanding and confident use of grooming techniques and equipment under time constraints</li> </ul>
Self-concept	<ul style="list-style-type: none"> <li>• Learners should be able to display good developmental levels of oneself</li> <li>• Learners should be able to be display ethics and maintain a balance between freedom and responsible behaviour</li> <li>• Learners should be able to create a self development and image building plan in harmony with abilities, interests and beliefs and prioritise effectively to meet the needs of the self, family and organisation</li> </ul>

conditioning can have a significant influence on business network, business accomplishment as well as competitive gain. (Adam 2004; Greaney and Kellaghan 1996; Goldsmith 2009; Nygaard et al. 2009). In order to make a positive difference to budding entrepreneurs, it is imperative to take a step forward and ameliorate them as 'brands' and thus facilitate larger impetus to their identities and businesses.

## 5 Conclusion

The market character of the global business environment and the vibrant dynamics of our society, pumped by constantly changing technology, urge a huge sense of competition for entrepreneurs and their organisations to perform and sustain consistently. Business orientation towards making oneself a true representation of the

brand one sells needs to become the order of the day, wherein the entrepreneur realises that he/she is the front face of his/her company and needs to project his/her own image and self brand lucratively to the world even before he/she can start selling his/her company product.

It is believed that every person invariably exists with an image, irrespective of it being good or bad, attractive or unattractive, positive or negative, etc., which is in constant reckoning by the outside world. It is a largely accepted fact that a person forms an opinion about you in the first three to thirty seconds of having met you, blatantly from visual appearance itself. Thus, it becomes imperative that an entrepreneur should be in a position to leverage this and present himself as a potent and positive professional in order to create the desired impact on the person. 'The first impression is the last impression', the famous saying has emerged as a testimony to this fact making it crucial for business leaders to ensure that one takes great care of his/her image and the desired impact it makes on people in one's professional, personal and social spheres of reach. One needs to be aware of what kind of messages his/her image is projecting and why and accordingly take corrective action if required.

In today's scenario, where the world is a global village and people thrive on networking, the distinction between social and professional lives is condensed significantly. The desire to make a place for oneself in this international setting has sparked off the necessity that shrouds appropriate dress and clothing, etiquette, grooming, body language and verbal skills. Competition is on the rise on domestic and global grounds and Indian entrepreneurs need to be a cut above the rest in order to make their presence felt and consolidate their positions as secure and trusted brands of the future. Despite being technically savvy and skilled, lack of attention in projecting the right 'image' about themselves may cost them heavily, in comparison with competitors from other emerging countries.

The time has come when we need to ponder and introspect. The time for a paradigm shift! The time for acceptance to look at oneself as a brand first and then the product we sell. Entrepreneurs have to take a step forward and inhale the essence of building and managing their own image for growth and success personally, professionally and socially. The Indian higher education system needs to build a concrete platform of learning with regard to image management to facilitate this in a pertinent and constructive manner and provide a huge advantage to the younger crop of entrepreneurs.

## **6 Limitations**

The scope of the research paper is limited to the comprehension and appreciation of the concept of image management, its core substance and six integral elements in reference to higher education. It, however, does not delve deep into the details of each element at an atomic level, which may thus constrain the in-depth understanding of the subject matter.

## 7 Unique Contributions

Firstly, the research provides a rather new area of study to the world of erudition and learning which is extremely pertinent to entrepreneurs and society in the current times. Secondly, the study aids the advancement of knowledge and awareness of image management, as also its relevance in order to augment the prowess of young business leaders and personalities in being strong and potent professionals and in helping them in the realisation of their goals. Thirdly, the research shall nudge the youth and others from different walks of life and strata who may have faced challenges in life at some point in time and aspire to overcome them, by learning to cultivate a stronger, more positive and effective image. Fourthly, entrepreneurs who would employ image management successfully would consider doing the same for their work force and eventually contribute to a more effective organisation they represent, in line with its vision and mission. Lastly, business leaders or people from various streams of life will see the benefit in adopting image management as part of their lives personally and professionally and work on their self-image and self-branding in a structured manner. And ultimately, the research on image management shall be a huge contributor in the creation of confident and competent people regardless of whether they are working professionals or not, and that would mean a more evolved and better society, at large.

## 8 Future Scope for Research

Research may be further carried out to examine the role of image management at other levels of the education system, be it secondary or higher secondary schools and thus bring in shades of persona management and value education at a fundamental and impressionable age for students across all geographical boundaries. That apart, since the subject relates to individuals and applies across the bandwidth of society, it would be interesting to research the role of image management with regard to people from various industries, diverse spheres of activity, profiles and ages.

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# Chapter 8

## Influence of Individual and Socio-cultural Factors on Entrepreneurial Intention

Bindu Singh, Pratibha Verma and M.K. Rao

**Abstract** In the last decade, intellectuals have paid attention to entrepreneurship education and training as a vital instrument for stimulating the entrepreneurial intentions, attitudes, and behaviors and enhancing economic productivity and development. However, entrepreneurship education is not effective and entrepreneurial reserve is limited in countries worldwide. Consensus on the factors affecting the individual's intention of starting business is also scant. Although numerous studies had identified the entrepreneurial intention factors, prior perspectives concentrate on either individual or socio-cultural aspect. The holistic perspective toward this issue and their linkages has not yet reached a consensus. Thus, literature suffers from incomplete explanation of this phenomenon. There is a requirement to illuminate the factors playing an influential role in affecting the individual's intention to open a firm in order to design, deliver, and implement more effective educational programs and training. To fill these gaps, this study examines the influence of individual and socio-cultural factors on entrepreneurial intention of the MBA students and applies SEM to test the hypotheses. Findings confirm the influence of individual and socio-cultural factors on entrepreneurial intention. With respect to findings, influential factors of entrepreneurial education and training are suggested. Managerial implications and research avenues are also directed.

**Keywords** Entrepreneurial education · Entrepreneurial intentions · Individual factors · Socio-cultural factors · Training

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# 1 Introduction

Over the last two decades, the financial unrest in developed economies influenced developing and marginal economies and led to the emergence of recovering markets, which brought global slowdown and changed the functioning of the world economy. Global competition also sprung and stimulated the mandate for new products and services. Therefore, a transformational and strategic approach is needed, according to scholars and practitioners to respond strategically to the environmental challenges and fulfill the demand for economic growth and sustainable competitive advantage of the business firms. From this economic restoration and sustained competitiveness prospect, there is considerable agreement among them that entrepreneurship is the key determinant in promoting national economic performance, creating employment, and generating wealth (European Commission 2003; European Commission 2006; Ernst & Young Global Limited 2013; Global Entrepreneurship Research Association 2014; National Knowledge Commission 2008; Planning Commission 2012; Rae 2010; Van and Versloot 2007; Wang 2007) and entrepreneurs are the main growth engines of a healthy economy (Ernst & Young Global Limited 2013).

Due to this strategic significance of entrepreneurship for economy, this construct recently comes in the list of political schemas and becomes a main concern for countries worldwide. This topic has also flourished interest in educational initiatives which can be gauged through the mounting amount of publications in academic literature (European Commission 2006; Mitra and Matlay 2004; Solomon 2007) and the research conducted by the governments (National Knowledge Commission 2008; Planning Commission 2012). Researchers figured this domain as one of the newcomers in socioeconomic sciences that has been flourishing by leaps and bounds and probing explanations of the entrepreneurship phenomenon (Antoncic and Hisrich 2003). Review of literature highlights that considerable work has been marshaled to measure entrepreneurship weighted with respect to economic development which approves the entrepreneurship phenomenon as an economic growth driver with substantial repercussions for wealth creation. However, scarcity of the entrepreneurial reserve is contiguous. In this concern, scholars, academicians, and government officials have paid significant attention to entrepreneurship education and training as vital instruments to stimulate the entrepreneurial intentions, attitudes, and behaviors of the individuals and further boost up economic productivity and speed up social development. Here, the importance of endorsing entrepreneurship initiatives to improve the current reserve of entrepreneurs, fuel economic development, and create employment opportunities comes into the picture (European Commission 2003; European Commission 2006; Ernst & Young Global Limited 2013; Global Entrepreneurship Research Association 2014; Mitra, 2008; National Knowledge Commission, 2008; Planning Commission 2012; Sanchez 2013). The basic notion is that educational initiatives are instrumental in making individuals attentive, creating cognizance on this career option, generating

required behavior, and highlighting its importance for individual, society, and economy (Liñán et al. 2011).

Despite this economic growth-related implications, entrepreneurship education and training programs are not effective and are somehow lacking to create entrepreneurs and stimulate economic growth. This is because of partial knowledge on how to stimulate or strengthen the individual's entrepreneurial intention. This is because understanding about the most prominent entrepreneurial factors that stimulate entrepreneurial intention, affect the decision for starting a venture, and further contribute toward the creation of nascent entrepreneurs is still inadequate (National Knowledge Commission 2008; Anderson et al. 2012; Audretsch 2012; Siegel and Renko 2012). Prior studies addressing cause-and-effect association between the factors and entrepreneurial intention concentrate on a single viewpoint, either the individual (Koh 1996; Thomas and Mueller 2000; Utsch and Rauch 2000; Mueller and Thomas 2001; Canedo et al. 2014; Lee et al. 2011; Rauch and Frese 2007) or the social-cultural viewpoint (Learned 1992; Krueger 2003; Aidis et al. 2008; Noguera et al. 2013). The holistic perspective toward this issue has not yet reached a consensus in the literature (Altinay et al. 2012). Additionally, the capacity explanation of each individual and social-cultural factor also does not reach an agreement. This inadequacy is a challenging concern. Thus, more explicit studies are necessitating improving the current status of knowledge.

### ***1.1 Prominence of Entrepreneurship in the Growth of the Indian Economy***

The National Knowledge Commission (2008) posited the significance of entrepreneurs in employment and economic growth of India. This report also mentioned further a demand for educational initiatives. The Planning Commission (2012) also stressed on cultivating a favorable entrepreneurial environment in which entrepreneurs can flourish and contribute for scalable economic growth. "Creating a Vibrant Entrepreneurial Ecosystem in India" report also mentioned that "Entrepreneurship-led economic growth is also more inclusive."

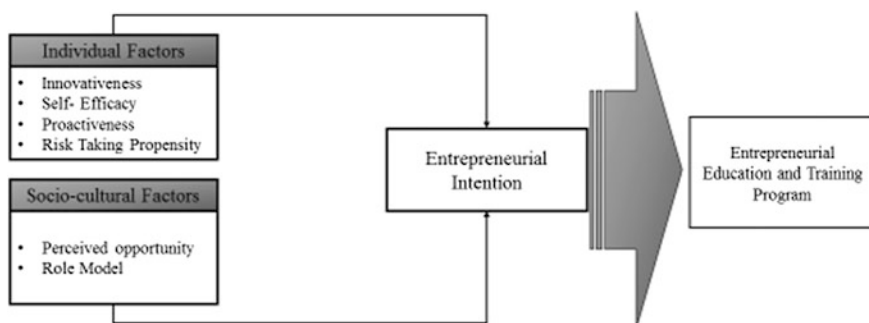
Ernst & Young Global Limited (2013) also reported on the significance of entrepreneurs and current condition of entrepreneurship in India. The research committee recommends the action to improve the current Indian reserve of entrepreneurs by improving and advancing entrepreneurial initiatives and point out the fact that Indian culture, although cheers entrepreneurship, however, reserve of Indian entrepreneurs is not representing an attractive figure. In this concern, this report not only posits the vital role of entrepreneurial training programs in the Indian context, but also submits the urgent need of entrepreneurial training.

In spite of these eye-opening facts in preceding years, the present Indian entrepreneurs' reserve figure is not remarkable. There is a huge difference in real and expected numbers of entrepreneurs. FICCI (Federation of Indian Chambers of

Commerce and Industry) and EY (Ernst and Young 2014) reported the lack of attention on entrepreneurship programs in India. In their report, “Higher education in India: moving towards global relevance and competitiveness” committee mentions that only a small number of Indian higher education institutions have entrepreneurship programs and courses. Among them, most of the courses are introduced only recently. Thus, there is a need for more entrepreneurial education initiatives in India to address the above-mentioned issues and boost up the economic growth.

Furthermore, the available entrepreneurial education initiatives and training programs are not effective. Although entrepreneurship researchers have dedicated excess of attention to widen its geographic margins, studies addressing this subject in the Indian environment are mostly scarce. Understanding of entrepreneurial intention factors of Indian students is particularly missing; this hampers designing effective entrepreneurial education and training programs in India and further impacts the entrepreneurship growth rate of the country. Suggestions for entrepreneurial programs are mostly based on studies that are conducted in developed economies or else in European context. As cultural and contextual difference prevails between these economies that influenced the entrepreneurial intention, the intention factors also differ in different context and lead to low effective rate of entrepreneurial programs. Thus, there is a need to investigate the entrepreneurial intention factors in India, for designing and developing effective entrepreneurial training programs.

With the intention to fill these gaps and further update knowledge, the current study attempts to deliver empirically based submissions for more effective entrepreneurial education and training programs to stimulate the growth rate of entrepreneurs oriented to Indian postgraduate management students. The major objective is to examine the impact of individual and socio-cultural factors on students’ entrepreneurial intention. The study proposes a research model to achieve the objective. Statistical tool structural equation modeling on the sample of 758 Indian postgraduate management students was applied to test the proposed hypotheses and validate the model as shown in Fig. 1. The present study also concerns with the role



**Fig. 1** Research model

of most important personality and socio-cultural, entrepreneurial intention factors of management students.

The present paper is planned as follows. Introduction follows the literature, theoretical consideration, and hypothesis development. Subsequently, empirical analysis and discussion appear. Afterward, the role of entrepreneurial education and training programs are discussed along with the theoretical contribution of the study. Finally, a discussion on study limitations and future research avenues is shown.

## **2 Theoretical Consideration and Hypothesis Development**

Entrepreneurship has been demarcated as the specific process that leads to emergence of establishments (Gartner et al. 1992). Substantial consensus becomes apparent in the literature that entrepreneurial intentions, the effort one is willing to invest with the intention to act in a specific way or else one's willingness to attempt something (Ajzen 1991), are fundamental to the occurrence of this process. The entrepreneurial intentions envisage required behavior that creates the platform for the series of activities to start a venture (Ajzen 1991; Krueger 1993; Kolvereid 1996; Souitaris et al. 2007).

### ***2.1 Precursors of Entrepreneurial Intention***

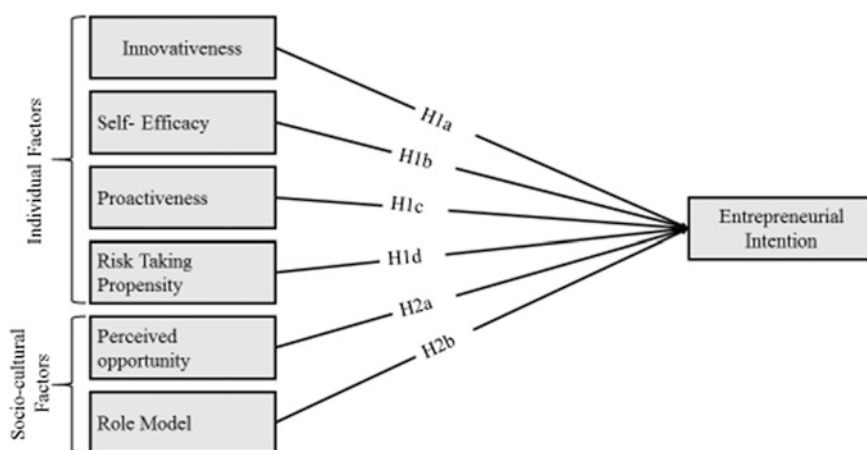
Given that entrepreneurial intention precedes entrepreneurial behavior or entrepreneurship (Ajzen 1991; Kolvereid 1996), certain elements also envisage intention (Utsch and Rauch 2000; Marques et al. 2012). There is sizable discussion in the literature on precursors capable of generating entrepreneurial intention with altering methodologies (Gartner 1985, 1989; Rauch and Frese 2007). The first explanation was projected by the trait approach where the personality of the individual was ascribed as a whole-sole responsible factor affecting the entrepreneurial intentions (McClelland 1961). Following this approach, various personality traits were proposed such as innovativeness, locus of control, need for achievement (Koh 1996; Robinson et al. 1991), moderate risk-taking orientation, high tolerance of ambiguity (Koh 1996; Rauch and Frese 2007), and self-efficacy (Krueger 2003). However, due to the lack of consideration on various serious aspects of entrepreneurial intention, this approach experienced a wide criticism (Shapiro and Sokol 1982; Gartner 1985, 1989; Ajzen 1991; Altinay et al. 2012). Based on the logic that entrepreneurial phenomenon takes place in diverse circumstances and in interface with the new entities and the environment (Robinson et al. 1991), the entrepreneurial intention phenomenon was further explained by a contextual approach. To speculate this issue more, behavioral approach also came into the picture (Gartner 1989) and a new paradigm was proposed, namely theory of planned behavior (Ajzen 1991) which paves the way for contextual factors (Krueger et al. 2000).

Proponents of this approach emphasized on background aspects of an individual and address socio-cultural factors for stimulating and developing entrepreneurial intention (Mueller and Thomas 2001; Krueger 2003; Liñán et al. 2011; Aidis et al. 2008; Noguera et al. 2013) as the informal institutions, such as fear of failure, perceived capabilities, perceived opportunities, role models, and family background, investigated (Noguera et al. 2013; Koellinger et al. 2005). Researchers claim that “individuals have a combination of psychological traits in interaction with background factors that make them more likely candidates to attempt to find businesses” (Learned 1992). However, investigation of both the aspects together in a single model is lacking.

Adopting a holistic perspective, this paper examines the influence of innovativeness, self-efficacy, proactiveness, risk propensity (individual factors), perceived opportunities, and role models (socio-cultural factors) on entrepreneurial intention. This section explores the literature and develops the hypotheses. Three leading theoretical perspectives toward entrepreneurship, namely the entrepreneurial event theory (Shapero and Sokol 1982), institutional economics (North 1990), and theory of planned behavior (Ajzen 1991), provide the foundation for the study. Figure 2 shows the hypothesized model.

## 2.2 Influence of Innovativeness

Among all personality traits, innovativeness has been defined the essential one to become an entrepreneur (Kirton 2003). This significance of innovativeness for entrepreneurial intention and behavior can be measured with the number of publications exploring the role and nature of innovativeness for entrepreneurial



**Fig. 2** Hypothesized model

phenomenon (Drucker 1985; Goldsmith and Hofacker 1991; Thomas and Mueller 2000). Schumpeter (1990) utilizes both entrepreneur and innovator synonymously. The significant variance from entrepreneurs to non-entrepreneurs with respect to innovation was specified by Robinson et al. (1991), Koh (1996) both. They posited that entrepreneurs possess more innovativeness. Gurol and Atsan (2006) also identified the significance of innovativeness for entrepreneurial intention and behavior. This implies that innovativeness significantly influences entrepreneurial intention and is an important precursor of entrepreneurship. Literature suggests that individual's creativity, and their tendency to create and embrace new ways (Goldsmith and Hofacker 1991) instigate them to take decisions independently, start a business venture (Mueller and Thomas 2001) and make the venture successful (Rauch et al. 2000). Mueller and Thomas (2001) and Gurol and Atsan (2006) confirmed that innovativeness is an indispensable factor for opening a venture. Gurel et al. (2010) in their study in Britain and Turkey find the significant influence of innovativeness on entrepreneurial intention in the tourism industry. Recently, Altinay et al. (2012) in their study on UK hospitality university students also confirmed the positive connection between innovativeness and intention to become self-employed. Therefore, a high level of innovativeness precedes entrepreneurial intention. Collating this discussion, the following hypothesis is formulated:

H1a: Innovativeness has a significant impact on an Indian postgraduate management student's entrepreneurial intention.

### ***2.3 Influence of Self-efficacy***

Considered to be the most explanatory personality factors, self-efficacy represents capacity of individuals to produce an anticipated outcome. Researchers sketched self-efficacy as conviction of individuals in their own ability to complete a job (Bandura 1977) and mentioned that individuals possessing self-efficacy are more tending to pursue a particular set of tasks and to involve in the new undertaking formation process (Zhao et al. 2005; Liñán et al. 2011). Krueger et al. (2000) advocated the self-efficacy effect on entrepreneurship process. Pruett et al. (2009) promoted self-efficacy as a basic element for entrepreneurial disposition and a minimal criterion factor for becoming entrepreneurs. Sánchez (2013) advocated the significance of self-efficacy in entrepreneurship and posit four reasons for this influence. First, this trait makes individuals believe in their capabilities; second, it possesses an element of risk involved in an entrepreneurial initiative; third, it comprises of occupational interests, personal effectiveness, and perseverance in the face of difficulties (Krueger and Dickson 1994) that are linked to entrepreneurial goings-on; and fourth, it emphasizes individuals' beliefs that their engagements will have attainable outcomes and greater incentives. Accumulating this discussion, self-efficacy of an individual intensifies the intention of starting a venture. Based on these conclusions, the following hypothesis is formulated:

H1b: Self-efficacy has a significant impact on an Indian postgraduate management student's entrepreneurial intention.

## ***2.4 Influence of Proactiveness***

Individual's propensity to act, namely proactiveness (Bateman and Crant 1993), has been defined as a vital ingredient in the recipe of entrepreneurship. Researchers cited that entrepreneurial intentions and behavior are concomitant with having a propensity to act (Crant 1996) and placed it among the three magnitudes of entrepreneurial orientation along with risk propensity and innovation and further denote its importance (Covin and Slevin 1989). Becherer and Mauer (1999) quoted that proactive personality significantly leads to entrepreneurial intention and encourages the start-up of new ventures in their study on the general population and established enterprises. Sanchez (2013) advocated that individuals possessing proactiveness trait always keep themselves aware about the opportunities and threats, take initiatives, and make changes. Seibert et al. (2001) also acclaimed that proactiveness is a basic factor of intention-behavior relation. Collecting this discussion, proactiveness leads to entrepreneurial intention and further behavior. Based on these judgments, the following hypothesis is formulated:

H1c: Proactiveness has a significant impact on an Indian postgraduate management student's entrepreneurial intention.

## ***2.5 Influence of Risk-Taking Propensity***

Researchers defined individual's predisposition to display risk-taking behavior when met with situations comprised of an element of risk as risk-taking propensity (Gurol and Atsan 2006) and placed it among the major trait of entrepreneurs (Begley and Boyd 1987; Kolvereid 1996; Thomas and Mueller 2000). This significance can be well understood from the entrepreneurship definition proposed by Hisrich et al. (2007). This definition specifies entrepreneurship as "the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risk, and receiving the resulting rewards." Zhao et al. (2005) connected risk propensity positively with self-employment intentions of individuals through self-efficacy. Gurol and Atsan (2006) and Koh (1996) mentioned that risk-taking tendency leads to more inclination toward entrepreneurial activities. Gurel et al. (2010) also highlight that intention to start up a venture highly depends on the propensity to take risk. Recently, Sanchez (2013) mentions risk-taking propensity as a significant predictor of career options. Thus, a high level of risk-taking propensity leads to entrepreneurial intention and further behavior. Following these views, the following hypothesis is formulated:

H1d: Risk-taking propensity has a significant impact on Indian postgraduate management student's entrepreneurial intention.

## ***2.6 Influence of Perceived Opportunities***

In entrepreneurship domain, individuals who are more likely to be alert than others to the opportunities have been defined as entrepreneurs (Kirzner 1979). This suggests the effect of perceived opportunities on entrepreneurial intentions. Researchers acknowledged that entrepreneurial opportunities provide a significant impact on an individual's career option (DeTienne and Chandler 2007). Shane and Venkataraman (2000) outlined entrepreneurship construct as the study of "sources of opportunities." Based on these views, recently, Noguera et al. (2013) stated that recognition of opportunity exemplifies the most distinguishing and essential manifestation of entrepreneurial behavior. Thus, higher level of perceived opportunities creates and strengthens the entrepreneurial intention. Based on these judgments, the following hypothesis is formulated:

H2a: Perceived opportunities have a significant impact on an Indian postgraduate management student's entrepreneurial intention.

## ***2.7 Influence of Role Model***

The role model literature shows the value of seeing entrepreneurs with respect to their connection to social networks (Hoang and Antoncic 2003). Studies suggest that individual's social background influenced the likelihood of self-employment. Davidsson and Honig (2003) pointed out that individuals who have been surrounded with entrepreneurs have been encouraged more to start a business than others. Role models influence individuals' perceptions greatly toward their own entrepreneurial skills and enhance their self-efficacy level (Altinay and Altinay 2006; Minniti and Nardone 2007; Urbano and Yordanova 2008; Pruett et al. 2009; Canedo et al. 2014). Chaston and Scott (2012) submit that individuals belonging to an entrepreneur's family have more inclination toward their own business. The existence of an entrepreneurial family member raises the desire of becoming an entrepreneur since such personality acts as a role model (Altinay and Altinay 2006; Pruett et al. 2009). In the same line, Auken et al. (2006) also specify the influence of role model on entrepreneurial intentions.

Researchers acclaim that an individual, who is a descendant of entrepreneurs, when involved in one's own business gains knowledge from experienced entrepreneurs and becomes socialized with successful role models other than family. These experiences and the feeling of self-employment convey constructive messages to the potential entrepreneurs. Further, the experiences acquired from business provide useful information which decreases the uncertainty accompanied



with starting of a venture (Urbano and Yordanova 2008). Grounded on these inferences, the following hypothesis is formulated:

H2b: The role model has a significant impact on an Indian postgraduate management student's entrepreneurial intention.

### **3 Methodology**

#### ***3.1 Measurement of Constructs***

An extensive review of literature provides the foundation for the development of the measurement scale. Few adjustments were made in the wordings of the items according to the context. Throughout the questionnaire, "seven-point Likert-type scales" were used that were extended from "strongly disagree" (1) to "strongly agree" (7).

Innovativeness was measured by eight items utilized by Mueller and Thomas (2001) and adapted from a revised version of the Jackson Personality Inventory. This measure reflects the tendency of an individual to be creative. Risk-taking propensity was measured by ten items associated with social and monetary risk-taking dimensions, adapted from a revised version of the Jackson Personality Inventory (Jackson 1994). This scale measures an individual's ability to take risks. Self-efficacy was administered by six measures adapted from the scale of Wilson et al. (2007). This measure represents the individuals' belief in their own capability. Proactiveness was administered by ten items adapted from the scale of Seibert et al. (2001). This scale evaluates the extent to which individuals undertake actions to impact their surroundings. Role model was measured by the twelve-item scale of Auken et al. (2006). This scale measures the influence of role model on individuals. Perceived opportunity was measured by ten items of Howell et al. (1984). These measures reflect an individual's perception toward the available opportunity. Entrepreneurial intention was measured by three items proposed by Krueger et al. (2000) that represent an individual's willingness to become self-employed.

#### ***3.2 Research Context and Sample***

Indian MBA students were the sample of the study. Business schools operating in Lucknow, a capital city of the state of Uttar Pradesh, India, provide a robust setting. Based on convenience and popularity of the schools, a total of twenty business schools were selected to realize the purpose. Information was collected from the Web sites of business schools and the administrative personnel. A total of 987 students were found out for inclusion via the simple random-sampling method. The major purpose of focusing on the students as respondents was to examine the

intentional progressions before their decision to become employed or self-employed as mentioned by Krueger (1993).

### 3.3 Data Collection and Procedure

Cross-sectional field survey research design was chosen to collect the primary data. Two senior professors having proficiency in this sphere verified the draft questionnaire. Based on their suggestions, improvements were made in the questionnaire. Then, final questionnaire was distributed to second semester MBA students for collecting their perceptions during March and April 2014. From the 987 distributed questionnaires, 758 were valid and usable (76.69% response rate). Among 758 students, 32.6% were female and 67.4% were male. Further, the normality of the data distribution was confirmed and missing data points were checked, following Kline (1998). The probable difference between the sample employed in the study and population was tested by employing Kolmogorov–Smirnov test. The results demonstrate no significant dissimilarity at the confidence level of 95%. Through Harman one-factor test, common method bias was also checked. Results disclose that bias for this inquiry is of little concern (Podsakoff et al. 2003).

### 3.4 Measurement Model

Table 1 shows the descriptive statistics of constructs. Results show that Cronbach's alpha value is greater than 0.70 and confirm the internal reliability of the scales (Nunnally and Bernstein 1994).

**Table 1** Descriptive statistics

Construct	Mean	SD	C- $\alpha$	IN	SE	PRO	RP	POP	RMO	EI
IN	3.8455	1.02710	0.98	1						
SE	4.6037	1.23277	0.948	0.172*	1					
PRO	3.2375	0.67072	0.949	0.481**	0.190**	1				
RP	3.7504	1.10462	0.958	0.467**	0.149*	0.444**	1			
POP	5.2494	1.46645	0.968	0.231**	0.052	0.105	0.200**	1		
RMO	5.2498	0.68801	0.948	0.063	0.038	0.038	0.111	0.096	1	
EI	5.7780	0.83141	0.847	0.301**	0.130*	0.090	0.270**	0.419**	0.325**	1

Source Authors' estimation

Note IN Innovativeness, SE Self-efficacy, PRO Proactiveness, RP Risk-taking propensity, POP Perceived opportunity, RMO Role model, EI Entrepreneurial intention, SD standard deviation, C- $\alpha$  Cronbach's alpha, \*  $p < 0.001$ , \*\*  $p < 0.05$

**Table 2** Discriminant validity

Constructs	CR	AVE	MSV	ASV	IN	SE	PRO	RP	POP	RMO	EI
IN	0.948	0.697	0.211	0.098	0.835						
SE	0.950	0.759	0.033	0.017	0.164	0.871					
PRO	0.950	0.653	0.211	0.075	0.459	0.181	0.808				
RP	0.958	0.697	0.204	0.089	0.452	0.141	0.435	0.835			
POP	0.969	0.756	0.176	0.047	0.223	0.050	0.101	0.191	0.869		
RMO	0.948	0.604	0.106	0.022	0.061	-0.035	0.044	0.107	0.086	0.777	
EI	0.864	0.680	0.176	0.078	0.301	0.130	0.090	0.270	0.419	0.325	0.825

Source Authors' estimation

Note IN Innovativeness, SE Self-efficacy, PRO Proactiveness, RP Risk-taking propensity, POP Perceived opportunity, RMO Role model, EI Entrepreneurial intention, AVE average variance extracted, CR composite reliability, MSV Maximum shared variance, ASV Average shared variance

Table 2 displays the results regarding discriminant validity, convergent validity, and internal reliability. In order to examine the discriminant validity, Fornell and Larcker (1981) approach was used, which implies the distinctiveness of each construct with another by making comparison of average variance extracted (AVE) values with its squared correlation coefficient. If squared correlation coefficient is lower than AVE value, this signifies the presence of discriminant validity and this condition is satisfied in the study. Hair et al.'s (2010) approach was also employed for checking the robustness of discriminant validity which compares the values of maximum shared variance and average shared variance with AVE, when both are lesser than AVE then, it sanctions the discriminant validity. All conditions are satisfied as Table 2 displays the results. By going with the concept of Fornell and Larcker (1981), convergent validity is confirmed when AVE is greater than 0.50 and CR more than 0.60. In the present study, AVE is between 0.604 and 0.759 and CR ranges from 0.864 to 0.969.

### 3.5 Structural Model

Table 3 shows the fit indices as  $X^2/df = 1.993$ , GFI = 0.870, CFI = 0.933, NFI = 0.895, AGFI = 0.791, and RMSEA = 0.071. All indices are in the acceptable range (Anderson and Gerbing 1988) and allowed us to perform hypothesis testing.

Table 4 shows the result of hypothesis testing. The first bunch of hypotheses examines the effect of individual factors on entrepreneurial intention. Hypothesis 1a explains that innovativeness of an individual has a significant effect ( $\beta = 0.596$ ,  $\rho = 0.000$ ) on entrepreneurial intention. Hence, H1a was supported. Hypothesis 1b sees the significant effect ( $\beta = 0.324$ ,  $\rho = 0.001$ ) of self-efficacy on entrepreneurial

**Table 3** Fit indices of structural model

Fit index	Validation value
CMIN	3242.677
CMIN/df	1.993
GFI	0.870
AGFI	0.791
PGFI	0.689
NFI	0.895
CFI	0.933
TLI	0.856
PNFI	0.723
PCFI	0.821
RMSEA	0.071

Source Authors' estimation

Note  $\chi^2/df$  chi-square/degree of freedom, *GFI* Goodness-of-fit index, *RMSEA* root mean square error of estimation, *AGFI* Adjusted goodness-of-fit index, *NFI* Normed fit index, *CFI* Confirmatory fit index, *PGFI* Parsimony goodness of index, *PNFI* Parsimony normed fit index

intention. Thus, H1b was supported. Hypothesis 1c clarifies that proactiveness of an individual does not have a significant effect ( $\beta = 0.086, \rho = 0.601$ ) on entrepreneurial intention. Thus, H1c was not supported. Hypothesis 1d examines the impact of risk-taking propensity of an individual on entrepreneurial intention and found a significant effect ( $\beta = 0.221, \rho = 0.002$ ). Hence, H1d was supported.

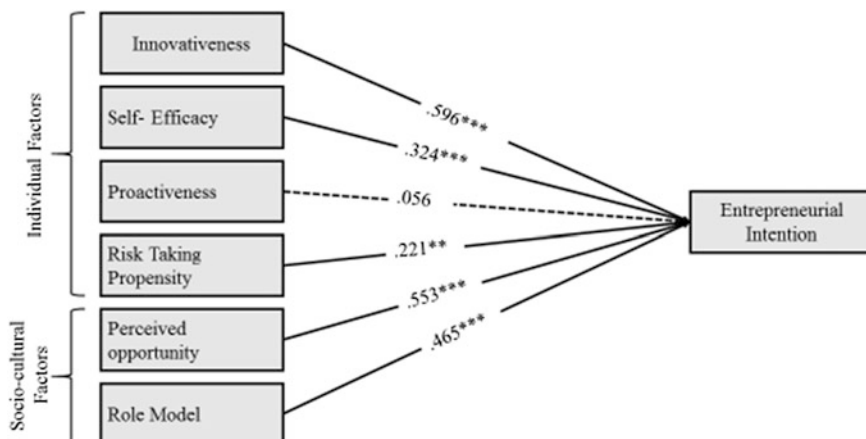
The second bunch of hypotheses examines the effect of socio-cultural factors on entrepreneurial intention. Hypothesis 2a explains the significant effect ( $\beta = 0.553, \rho = 0.000$ ) of perceived opportunities on entrepreneurial intention. Hence, H2a was supported. Hypothesis 2b examines the impact of role model on entrepreneurial intention and was found significant ( $\beta = 0.465, \rho = 0.000$ ). Thus, H2b was supported. The graphical representation of the hypothesis testing is given in Fig. 3.

**Table 4** Results of hypothesis testing

Hypothesis	$\rho$	$\beta$	Remark
H1a	0.000	0.596	Supported
H1b	0.001	0.324	Supported
H1c	0.601	0.056	Not supported
H1d	0.002	0.221	Supported
H2a	0.000	0.553	Supported
2b	0.000	0.465	Supported

Source Authors' estimation

Note *b* Estimates  $\rho$  Significance value



**Fig. 3** Hypothesis testing. *Source* Authors estimation. *Note* \*\*\* $p < 0.001$ , \*\* $p < 0.05$

## 4 Discussion

The impetus of the study is the most noticeable and pertinent contribution that entrepreneurs make in promoting national economic performance. The fundamental theme of this inquiry was to offer valuable submissions to design, deliver, and implement the effective entrepreneurial programs and training and further enhance the effectiveness of entrepreneurial educational initiatives. The major objective of the study was to examine the impact of individual and socio-cultural factors on intention of Indian postgraduate management students to start a venture. Based on empirical findings, interpretations are given below.

The empirical results indicate that individual factors comprised of innovativeness, self-efficacy, and risk-taking propensity influence the entrepreneurial intention of the Indian postgraduate management students. In the case of innovativeness, consistent with the prior studies, the significant influence on entrepreneurial intention was identified (Mueller and Thomas 2001; Gurol and Atsan 2006; Gurel et al. 2010). Further, results reveal that among the postgraduate management students, intention for entrepreneurship is significantly influenced by their level of self-efficacy, which is in unison with existing research (Krueger and Dickson 1994; Liñán et al. 2011; Sánchez 2013). Whereas in case of proactiveness, contrast to prior studies (Covin and Slevin 1989; Seibert et al. 2001; Sanchez 2013), results indicated the negative association. This result enumerates some aspects for further evaluation. Finally, in case of the personality factor, the study shows the impact of risk-taking propensity on postgraduate management students' entrepreneurial intention. This finding also maintains harmony with the literature (Kolvereid 1996; Zhao et al. 2005; Sanchez 2013), such as innovativeness and self-efficacy. Further, the empirical results predict that socio-cultural factors also have an effect on Indian postgraduate management students' intention for their own venture. Perceived

opportunity plays a dominant role and influences student's entrepreneurial intention significantly. These findings are consistent with the prior literature (Shane and Venkataraman 2000; Noguera et al. 2013). In the case of role model, results also indicate a positive influence. Thus, the study affirms the findings of the prior literature addressing the association of role model and entrepreneurial intention (Auken et al. 2006; Minniti and Nardone 2007).

Additionally empirical, data-based results indicate the most significant entrepreneurial intention-determining factor. In case of individual factors, innovativeness emerges as the most contributing factor for stimulating entrepreneurial intention. More than risk-taking propensity, self-efficacy plays a vital role in students' intention to start a venture. In case of socio-cultural factors, although the results reveal that role model has a significant association with the entrepreneurial intentions, the role of perceived opportunities is more significant; this suggests perceive opportunities as the most significant socio-cultural precursor of entrepreneurial intention.

## **5 Theoretical Contributions of the Study**

Firstly, this study tests a holistic framework comprised of individual factors and socio-cultural factors and intention to start up a venture, thereby addressing the gaps left in the literature by prior researchers. Second, this study makes an initial attempt to apply three influential frameworks of entrepreneurship domain and contributes significantly. Third, very few researches have been conducted addressing intention issue in the Indian context. Thus, the current study extends the contextual boundaries of entrepreneurship literature by exploring this phenomenon in the Indian context and contributes simultaneously to the entrepreneurship literature and the Indian academia. Fourth, the study offers valuable suggestions to design and implement the effective entrepreneurial education and training programs. Fifth, this study employs SEM statistical technique and contributes to the methodological demand in the literature.

## **6 Recommendations for Entrepreneurship Education and Training**

This study suggests that educational initiatives should give first preference to the role of innovativeness for enriching and creating entrepreneurial intention at the individual level. Although many of the individuals possess the innovation capability, many among them hesitate to start a venture due to the absence of specialized knowledge and skills required for the establishments and the people, who start their own ventures, sometimes fail, or struggle for the survival. In this respect, being the significant determinant of entrepreneurial intention, educational initiatives can play

a dominant role. The current study suggests that entrepreneurial education should enrich individual's knowledge and strengthen their intention for the creation, survival, and the success of their venture. In this case, the study recommends entrepreneurial training as the best medium to considerably intensify the rate of start-ups and suggests that training programs should concentrate on fostering required skills and abilities, stimulating motivation level, discussing business plans, and visiting industries.

Furthermore, educational initiatives are also suggested to consider the role of self-efficacy. In this concern, the study advocates formal and informal educational pedagogies. Under informal pedagogies, independent projects and independent decision making are suggested. Business games, role-plays, in-basket techniques, and icebreaking and skill development exercises are recommended, under formal pedagogies. In addition, inclusion of educational initiatives with appropriate pedagogies is also recommended to enhance individuals' risk-taking propensity.

In concern with socio-cultural factors, the contributory role of perceived opportunities is strongly recommended. Students who are aware of the possible opportunities are more inclined to entrepreneurial activities. Thus, the study suggests that the most important societal aspect of entrepreneurial intention is the knowledge about available opportunities as well as students' positive perceptions toward utilizing those opportunities. Here, training should enrich students' thought with the required entrepreneurial knowledge and bombard them with lot many opportunities available in the market. Along with classroom knowledge about the opportunities, real-world interaction with entrepreneurial prospects should be facilitated. The prominence of role models for stimulating and developing entrepreneurial intention is also considered, and the industrial visits, internships, and lectures of industry experts are as well recommended. Thus, the study suggests incorporating strengthening measures constituting of innovativeness, self-efficacy, risk-taking propensity, perceived opportunities, and role model, while designing and implementing the entrepreneurial education and training programs.

## **7 Limitations and Scope for Further Research**

This study, as with others also, has few limitations that further lead to research avenues. First, cross-sectional design does not authorize inferences concerning causation among the employed variables. Thus, future research based on longitudinal designs is fortified. Second, all of the measures reflect the perceptions of students which can lead to some biases; further study should incorporate other parties. Comparative analysis could also be the potential research avenue. Third limitation is related to the cultural context. Since this study is conducted in the emerging economy, India, the results may not be applied to other economies as there are huge differences among these economies. An interesting opportunity for forthcoming research could be the international context for the study. Fourth, while exploring the determining factors of entrepreneurial—intention, this study limits its

focus on individual and socio-cultural factors of entrepreneurial intention; further research should include other factors. In addition, under individual and socio-cultural aspects, other factors, such as locus of control and tolerance of ambiguity, need consideration.

## 8 Conclusion

Entrepreneurship contributes to the economy of the country by stimulating innovation, creating competition, and constructing employment and thus subsidizes economic wealth. Hence, understanding the creation of entrepreneurial intentions among individuals is significant for stimulating their entrepreneurial behavior and eventually stimulating entrepreneurship that is a good forecaster of consequent behavior. This study maintains that individual and socio-cultural factors both have significant explanatory power on entrepreneurial intention and in turn on the decision to start a venture. Thus, consideration should be given to both the factors comprised of innovativeness, self-efficacy, risk-taking propensity, perceived opportunities, and role model while designing entrepreneurial education and training programs. In this respect, various formal and informal pedagogies are suggested. Future research considering other entrepreneurial intentions is motivated such as tolerance for ambiguity, perceived feasibility, and locus of control. Incorporating the perceptions of trainers and faculty members of entrepreneurship courses and entrepreneurs for further research is also fortified.

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# Chapter 9

## Relationship between Entrepreneurship Education and Entrepreneurial Intentions: A Validation Study

Preeti Tiwari, Anil K. Bhat and Jyoti Tikoria

**Abstract** Although most of the reputed higher education institutes in India have started entrepreneurship courses, very less emphasis has been given towards finding out the effect of entrepreneurship education and their intentions to become entrepreneurs. This paper evaluates and examines the role of entrepreneurial intentions and their antecedents among 200 students at a premier higher education institute of India by using Ajzen theory of planned behaviour. This research paper seeks to understand whether and how entrepreneurship education affects the intention of the students in India. Multiple regression analysis is used to test the relationship between independent variables (entrepreneurship education, attitude towards behaviour, subjective norms and perceived behavioural control) and dependent variable (entrepreneurship intention). Results indicate a positive relationship between entrepreneurship education and entrepreneurial intention. The finding validates the effect of entrepreneurship education on entrepreneurial intentions and also encourages academicians to develop courses on entrepreneurship and to increase the entrepreneurial intentions among their study.

**Keywords** Entrepreneurship · Entrepreneurship education · Entrepreneurial intention · Theory of planned behaviour

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## 1 Introduction

The recent economic crisis and global recession has increased the tremendous need to position social question at the heart of the economy. Entrepreneurship can prove to be an important tool in order to restore a better equilibrium between economic development and social well-being. It emerges as a very lucrative career option for school and university graduates (Kennedy 2003). An entrepreneurial intention is considered as a conviction that particular person will perform certain behaviour. Intention towards entrepreneurial activities highlights the type of drift that person has in order to go for self-employment rather than choosing fixed job structure. Last few decades have witnessed the tremendous growth of entrepreneurship education in India. Most of the reputed higher education institutes in India started courses related to entrepreneurship in order to promote entrepreneurial activities among youth. In a recent development, various universities start offering Master degrees in the field of entrepreneurship (Liñán 2004). According to Gartner, there are academicians such as Turker and Selcuk (2009a) who proved entrepreneurship education as one of the most important components and considered as an addition for entrepreneurship. For that reason, we can say that any effort to describe entrepreneurship courses should be based on an inspection of the entrepreneurship (Gartner 1985).

Early research on antecedents that will affect the perception of person to opt for venture creation mainly targeted towards measuring the basic personality traits of the person (Brockhaus 1980, 1982; McClelland 1965). Researchers find that entrepreneurial intention is an essential tendency for the creation of enterprise and an emerging field that attract considerable amount of research.

For predicting entrepreneurial intentions, researchers normally studied used intention models. These popular models are more or less similar in the sense that they all emphasis on the pre-entrepreneurial stage and integrate attitude and behaviour theory (Gartner 1985; Van de Ven et al. 1984).

Intention models developed by various prominent researchers were used over the year in order to measure entrepreneurial intentions (Bird 1988; Boyd and Vozikis 1994; Shapero 1975; Shapero and Sokol 1982). Despite being proved by various researchers that entrepreneurial education and prior experience in the relative area persuade person's perspective to opt for their own venture. The effect of entrepreneurship education or elective related to entrepreneurship on the overall morale of a person still remained relatively unexplored (Krueger and Brazeal 1994).

Researchers have empirically tested that entrepreneurship education is proved to be an important antecedent in order to motivate students to go for an entrepreneurial career, and also facilitates students for overall involvement in the activities related to entrepreneurship (Fayolle 2004; Matlay 2008). A longitudinal study conducted by Matlay (2008) on a sample of 64 graduates found out those students who were exposed to any course related to entrepreneurship became entrepreneurs (Matlay 2008).

According to Schumpeter theory of economic development, the main carrier of economic development is the pioneering Entrepreneur (Hagemann 2013).

Therefore, the importance of this wave of entrepreneurship can be considered as a boom for the overall development of the country such as India. Thus, keeping this in mind the main focus of this study was to identify the antecedent helpful in predicting entrepreneurial intentions. In other words, we tried to find out what are the factors that lead a person to incubate their own business. We study this question among samples of premier technical university students, for whom this choice has particular relevance. Therefore, in order to fulfil their educational desires well, it is important to know what verifies their career choices and intentions (Peterman and Kennedy 2003).

### ***1.1 The Motivation Behind Intentional Studies in Entrepreneurship***

Past researches on entrepreneurship mostly deal with the issue of finding out the reason for why few people go for venture creation (Marzocchi 2009; Shane et al. 2003). Therefore, the traditional way of merely looking into the difference between the traits of entrepreneurs and non-entrepreneurs does not able to solve this issue in an appropriate manner, as it might not necessarily able to find out what persuaded them to choose for such path (Walter and Dohse 2009). Therefore, to answer this question, the main emphasis of research should focus towards venture foundation. One common method is to follow and measure the whole procedure of inception. This method is hardly practicable, because entire process of venture inception is not an easy task; it may take months or years and quite possible that there may be sufficient time gap between idea and execution which is not feasible to measure (Cromie 2000; Farrington 2012). An additional way is to conduct a retrospective study of existing entrepreneurs and ask them about their journey and for forces that motivated them to choose such path.

Targeting on the course of action prior to venture formation, various types of techniques have been used by various researchers in order to generate more information about potential entrepreneurs (Liñán and Krueger 2013). Early stream of researchers were mainly targeted to find out the relation between traits and entrepreneurial behaviour. Although some characteristics are associated with entrepreneurs, there is no direct relationship found linking the two (Gartner 1985). Thus, the subject was excluded from the analyses, and contextual factors supporting the naissance of ventures took centre stage (Krueger and Carsrud 1993). Many researchers were not satisfied with this process; thus, they use cognitive approach to investigate the cognitive processes that stimulate people to go for venture creation and the linking loop between these two actors. The most trendy approach to involving attitudes and behaviour is incorporated through role models, including complementary levels such as intentions (Ajzen 1991a).

## 1.2 *Intention Models*

The reason for using intention to analyse start-up formation is very simple. Venture formation is cognizant and intended (Krueger et al. 2000); entrepreneurial phenomenon is most appropriately measured as premeditated behaviour (Bird 1988; Krueger et al. 2000). All planned behaviour is intentional Ajzen (1985). Thus, taking into consideration the entrepreneurship as a multi-step procedure heading towards venture development, intention can be taken as opening step and should be carefully examined (Lee et al. 2011).

In the field of entrepreneurial intention research, various intention models were used to study this phenomenon. These include the model proposed by Bird (1988) and developed by Boyd and Vozikis (1994), Shapero (1975), Shapero and Sokol (1982) model tested by Krueger and Carsrud (1993), and the Davidsson (1995) variation, which was used and modified by researchers to test university situation. These popular models are more or less similar in the sense that they all emphasize on the pre-entrepreneurial stage and integrate attitude and behaviour theory (Ajzen 1991a), and self-efficacy and social learning theory (Bandura and Bandura 1997).

In addition, these models also consider extrinsic factor, environmental factors, determination element and the pressure of other antecedents, emphasizing the importance of these variables to the amalgamation of entrepreneurial thoughts and intentions. Percentage of variance in intention changed according to the change in approaches (Krueger et al. 2000).

This research paper will validate the effect of enterprise education on intention using the Ajzen's model. Thus, the objective of this study was

- To test the efficacy of TPB in predicting entrepreneurial intentions among premier technical university students.
- To propose and validate measure of entrepreneurship education on entrepreneurial behaviour with the sample of students.

## 2 **Theory of Planned Behaviour**

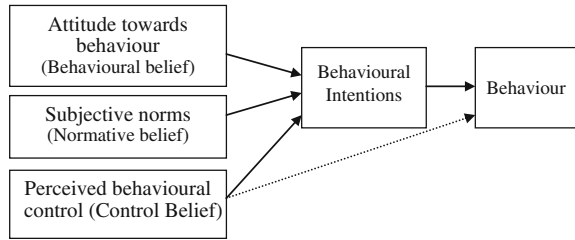
The theory of planned behaviour is an amplification of a renowned theory, the theory of reasoned action proposed by Martin Fishbein in the sixties (Ajzen 1991a).

The central theme of this theory is that behavioural decisions are affected by reasoned processes in which attitudes, subjective norms and perceived behavioural control influence the behaviour of a person (Ajzen and Fishbein 1980). The classic model of TPB is shown in Fig. 1:

- Attitude towards behaviour—In TPB, attitude towards behaviour refers a person's overall evaluation, i.e. positive and negative assessments of self-recitation on the certain behaviour. ATB refers one's personal pull towards particular



**Fig. 1** Classical model of theory of planned behaviour  
 Source Ajzen (1991a)



target behaviour. The most sought out construct of intention in the TPB is the attitude toward behaviour (ATB) (Fayolle 2004).

- Subjective norms—Subjective norms (SN) refers an individual’s own conjecture of the societal pressure in order to carry out certain behaviour. SN assumed to have two components—normative belief and motivation to comply. Normative belief depicts person’s belief regarding relevant others’ beliefs if they perform the particular behaviour, whereas motivation to comply refers how much person desire to behave constantly with the wisdom of the important others (Arasti et al. 2012).
- Perceived behavioural control—PBC is the belief of the person that he/she can perform the certain behaviour. PBC has two features: how much individual belief that there are certain factors that will facilitate or hold back performance regarding behaviour, and how convinced a person feels in order perform or not perform the behaviour (Engle et al. 2010).
- Behavioural intention: Behavioural intention is a determination of an individual to carry out a given behaviour in near future. Behavioural Intention is considered as an immediate ancestor of actual behaviour (Iakovleva and Kolvereid 2008).

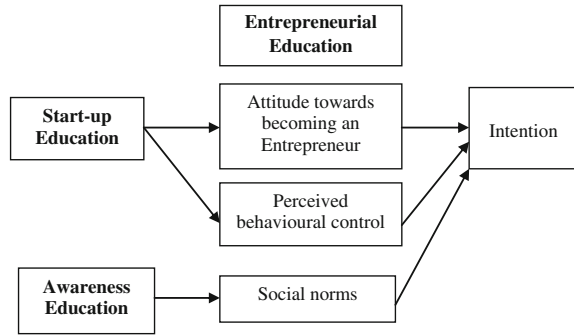
Thus, we can form the following hypotheses:

- H1: Attitude towards the behaviour is positively associated with entrepreneurial intention.
- H2: Subjective norms are positively associated with entrepreneurship intention.
- H3: Perceived behavioural control is positively associated with entrepreneurship intention.

### 3 Education and Perception of Entrepreneurship

Entrepreneurship creates lot of buzz around the world. Both private and public bodies are working towards spreading awareness regarding entrepreneurial activities. Thus, entrepreneurship is considered as a global phenomena and lot of mainstream colleges and universities come up with courses related to entrepreneurship.

**Fig. 2** Different affects of entrepreneurship education courses *Source* based on Liñán et al. (2011)



As described by Liñán (2004), entrepreneurship education can be defined as “*the whole set of education and training activities—within the educational system or not—that try to develop in the participants the intention to perform entrepreneurial behaviours, or some of the elements that affect that intention, such as entrepreneurial knowledge, desirability of the entrepreneurial activity, or its feasibility*”. This definition is very wide and emphasized on the knowledge, personal capacities and attitudes imbibing with entrepreneurship.

In respect to this research study, we have to make necessary changes in accordance with this study.

*Entrepreneurial awareness education:* The basic emphasis of this is to enhance the knowledge of people about small enterprises, start-ups, and entrepreneurship, so that they think about entrepreneurship as a rational and feasible career alternative. Well-known example of entrepreneurial awareness education would be elective courses offered by universities such as Stanford and Harvard. These types of courses are specifically designed for management or engineering streams. Tutors do not really aim to convert students into entrepreneurs, but they act as an advisor to facilitate them to make their future professional career selection with a greater perception.

*Education for start-up:* These types of courses are designed with main theme comprises of preparation necessary to become entrepreneur or to form a start-up. For example in some technical universities, they run some sort of application-based courses such as “New venture creation” with a aim to prepare students for start-ups by facilitating them with all the technical knowledge. It would be centred on the explicit realistic aspects related to the start-up phase: how to get financing; legal regulations; taxation; and so on (Lorz 2011) Fig. 2.

### **On the basis of literature survey, we formed following hypothesis**

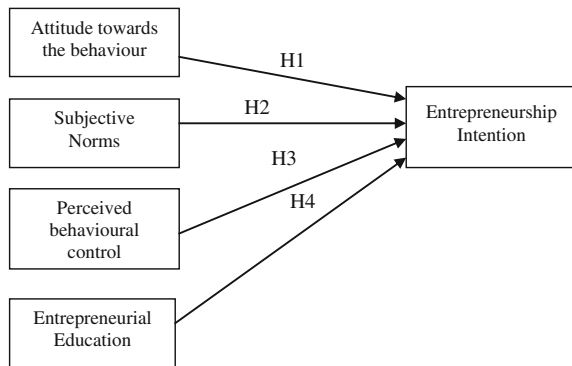
H4: Entrepreneurship education is positively associated with entrepreneurship intention.

**Table 1** Origins of antecedents in the research

Antecedents	Taken from
Attitude towards the behaviour	(Sagiri and Appolloni 2009); (do Paço et al. 2011); Liñán and Chen (2009); Beck and Ajzen (1991)
Subjective norm	(Pohja 2009); (Veciana et al. 2005); (Engle et al. 2010)
Perceived behavioural control	do Paço et al. (2011), Liñán and Chen (2009), Dohse and Walter (2010)
Educational background	Lee et al. (2011), Oosterbeek et al. (2008), Turker and Selcuk (2009b)

*Note* Based on research study of Wee et al. on higher learning institution

**Fig. 3** Proposed research model



## 4 Origins of Antecedents

Table 1

### Proposed Research Model:

Figure 3

## 5 Research Methodology

### 5.1 Research Framework

The purpose of this research study is to discover the utility of entrepreneurial education in examining entrepreneurial intentions among university students in India. Following a thorough literature review, the theoretical concepts identified were linked with empirical measures. The effect of education on entrepreneurial intentions was measured by respondent’s prior exposure to entrepreneurial courses and involvement in various entrepreneurial activities. Hypotheses H1, H2 and H3 are used to describe the impact of attitude towards becoming entrepreneur,

subjective norms and perceived behavioural control on entrepreneurial intentions, and H4 about the impact of education on entrepreneurial intention formation.

## 5.2 Research Design

Primary data were collected through distributing questionnaire to the students of one of the premier private universities of India. The university has 15 academic departments and focuses primarily on undergraduate education in engineering and the sciences. In the hope that students have a good knowledge over entrepreneurship, the questionnaire was sent to 300 students out of which 200 students responded to the questionnaire. The type of research sampling used is systemized random sampling. Seven-point Likert scale was used to measure the items.

### *Questionnaire design*

Following steps were followed by the researcher for questionnaire development:

- Recommendation based on the recent studies (Ertuna and Gurel 2011; Kolvereid and Isaksen 2006; Krueger and Carsrud 1993; Liñán 2004, 2011).
- Modified version of EIQ (Standard questionnaire) developed by Liñán and Chen (2006) as a base to generate questionnaire.

Entrepreneurial Intention Questionnaire (EIQ) is developed by Linan and Chen (2006). In their research study, Linan and Chen used EIQ to measure the entrepreneurial intentions of Spanish and Taiwanese students. This questionnaire was later validated by various prominent researchers in the field of entrepreneurial research (Kolvereid and Isaksen 2006; Krueger 2000).

Researcher used software for data analysis. For data analysis, AMOS 8 was used and to test Cronbach's alpha reliability and adequacy of the sample researcher used SPSS 21.

We use structural equation modelling to test the relationship between four independent variables (attitude towards becoming entrepreneur, subjective norms, perceived behavioural control and educational background) and one dependent variable (entrepreneurial intention).

## 5.3 Details of Respondents

Table 2

**Table 2** Demographic features of the sample are tabulated below

Variable	Categories	Frequency	%
Gender	Male	118	59
	Female	82	41
Age	Below 25	197	98.5
	Above 25	3	1.5
Family business	Yes	93	53.5
	No	107	46.5

## 6 Results and Discussion

### 6.1 Data Analysis

For the data analysis part, researcher used both exploratory and confirmatory factor analyses and tested convergent and divergent validity. Factor loading higher than 0.5 depicts convergent validity, and cross loading on other factors depicts discriminant validity.

SEM was used to analyse the direct, indirect and total effect of each antecedent and the overall explanatory power of the model. In this paper, we followed the standard two-step process: in the first step, researcher analysis measurement model by confirmatory factor analysis and at later step we test hypothesis with the help of SEM (Livote 2009). The Normed Fit Index (NFI) and the Comparative Fit Index (CFI) are relative fit indices as according to rule of thumb their values greater than 0.90 are considered as a good fit model (Fornell 1981). Besides this, the root mean square error of approximation (RMSEA) for which values lower than 0.07 indicate a reasonable fit of the model (Hair et al. 2010). To measure the goodness of fit of the model, researcher used chi-square ( $\chi^2$ ) analysis.

### 6.2 Exploratory Factor Analysis

Researcher used EFA to measure the adequacy of the sample by using Bartlett's test of sphericity and the Kaiser-Meyer-Olin's (KMO) measure of sampling adequacy. EFA result found KMO = 0.878 and a significant Bartlett's test ( $\chi^2 = 753.554$ ,  $p < 0.000$ ), indicating that factor analysis is appropriate (Hair et al. 2010). Reliability analysis was done on all the constructs by calculating Cronbach's alpha. By reliability analysis of the questionnaire, some items were removed and the rest was retained for structural equation modelling analysis as shown in Table 3:

#### 6.2.1 Measurement Model (Confirmatory Factor Analysis)

Measurement model is used to find out the relationship between items and latent variables. In the proposed model, 25 items were loaded on four exogenous factors (attitude towards becoming entrepreneur, subjective norms, perceived behavioural control and entrepreneurial education) and one endogenous factor (entrepreneurial intention). Descriptive statistics and correlation of the variables used in the study are given in Table 4. Confirmatory factor analysis was done in order to measure the reliability and validity.

**Table 3** Factor loading and Cronbach's alpha

Factors	Items	Factor loading	Cronbach's alpha
Attitude towards becoming entrepreneur	ATB1	0.643	0.718
	ATB2	0.563	
	ATB3	0.661	
	ATB4	0.552	
	ATB5	0.598	
Subjective norms	SN1	0.481	0.619
	SN2	0.598	
	SN3	0.609	
Perceived behavioural control	PBC1	0.718	0.831
	PBC2	0.834	
	PBC3	0.872	
	PBC4	0.749	
	PBC5	0.772	
	PBC6	0.912	
Entrepreneurial education	ED1	0.817	0.854
	ED2	0.763	
	ED3	0.789	
	ED4	0.824	
	ED5	0.833	
	ED6	0.815	
Entrepreneurial intentions	EI1	0.836	0.889
	EI2	0.885	
	EI3	0.943	
	EI4	0.958	
	EI5	0.887	

**Table 4** Descriptive statistics (mean and standard deviation) and correlation of the variables used in the study

Variable	Mean	Std. dev.	ATB	SN	PBC	Ent. Edu	Ent. Int
1. Attitude towards becoming an entrepreneur	6.72	1.89	0.73				
2. Subjective norms	7.38	1.46	0.34	0.67			
3. Perceived behavioural control	5.55	1.02	0.68*	0.55*	85		
4. Entrepreneurial education	3.85	1.25	0.62*	0.58*	0.42*	0.88	
5. Entrepreneurial intention	8.11	1.67	0.56*	0.51*	0.44*	0.63*	0.81

*Note* Diagonal values are the square root of AVE between the variables and their items, and off-diagonal elements are correlations: \* $p < 0.05$ . To measure discriminants' validity, diagonal values should be higher than the off-diagonals values in the same row and column. *ATB* Attitude towards becoming an entrepreneur, *SN* Subjective norms, *PBC* Perceived behavioural control, *Ent. Edu* Entrepreneurial educational background, *Ent. Int* Entrepreneurial intention

### 6.2.2 Reliability Analysis

First of all, individual reliability of the each item is derived by loading and correlating the items and variable ( $\lambda$ ). According to Hair et al. (2010), standardized outer loading should be higher than 0.60. Composite reliability ( $\rho_c$ ) is always preferred over Cronbach’s alpha. Standard value for both is same as 0.70 (Nunnally and Bernstein 1967). Composite reliability and average variance explained are shown in Table 5.

Summary of derived statistics for measurement model is shown in Table 6.

### 6.2.3 Structural Model

For hypothesis testing, we used SEM. The test showed good fit of the model. The derived statistics of model fit are: CMIN/DF = 4.62, IFI = 0.86, TLI = 0.84, CFI = 0.84 and RMSEA = 0.033. The variables in the model explain 57% of the social entrepreneurial intentions. Summary of derived statistics for measurement model is shown in 7.

As shown in Fig. 4, perceived behavioural control showed the strongest effect on entrepreneurial intention ( $\beta = 0.55$ ,  $p < 0.01$ ) followed by attitude towards

**Table 5** Composite reliability and average variance explained of the antecedents

Antecedents	Composite reliability	Average variance explained (AVE)
EI	0.937	0.780
ATB	0.741	0.519
SN	0.625	0.551
PBC	0.739	0.698
Entrepreneurial education	0.682	0.891

Note AVE is above 0.50

**Table 6** Measurement model

S. no	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit measures	RMSEA
	$\chi^2$	$\chi^2/df$	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 1	440.43	3.987	0.05	0.81	0.85	0.89	0.83	0.69	0.06

**Table 7** Derived statistics for model fit

S. no	Model fit		Absolute measures			Incremental fit measures		Parsimonious fit measures	RMSEA
	$\chi^2$	$\chi^2/df$	RMR	GFI	AGFI	CFI	TLI	PCFI	
Model 1	485.32	4.62	0.041	0.91	0.921	0.84	0.86	0.52	0.033

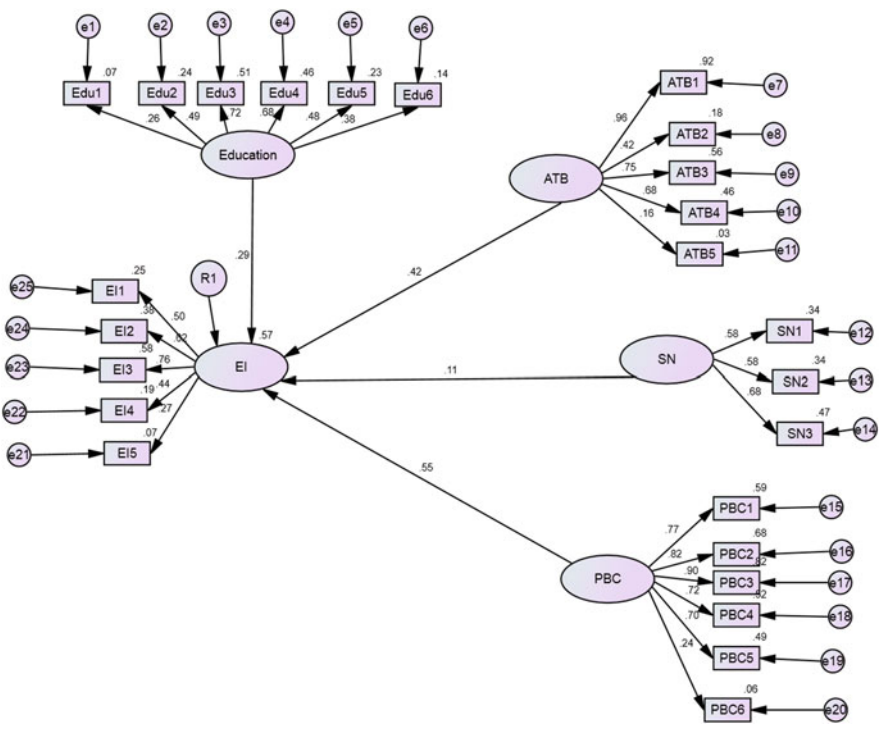


Fig. 4 Structural model (5-factor model)

becoming entrepreneur ( $\beta = 0.42, p < 0.01$ ). Entrepreneurial education showed moderate relationship with entrepreneurial intentions ( $\beta = 0.29, p < 0.01$ ). Subjective norms showed weakest relationship with entrepreneurial intention ( $\beta = 0.11, p < 0.001$ ). Results of SEM showed weak power of subjective norms in order to predict entrepreneurial intention (Krueger et al. 2009; Nabi and Liñán 2013; Rueda et al. 2015). Overall, four independent variables (attitude towards becoming entrepreneur, subjective norms, perceived behavioural control and entrepreneurial intention) elucidate high percentage of the entrepreneurial intention ( $R^2 = 0.57$ ), which show that independent variables were the significant predictors of entrepreneurial intention.

### 6.2.4 Hypotheses Testing

For testing the hypothesis in this study, SEM was used. Table 8 shows the relationship between antecedents, mediators and social entrepreneurial intentions. All four independent variables show significant relationship with dependent variable (entrepreneurial intention). Therefore, we accept all four hypotheses.



**Table 8** Regression weights (Group number 1—Default model)

Hypothesis	Estimates	Std. error	C.R.	P
ATB → EI	0.191	0.012	7.360	***
SN → EI	0.056	0.019	3.010	***
PBC → EI	0.201	0.026	7.689	***
Ent. Edu → EI	0.282	0.057	4.969	***

*Note* ATB Attitude towards becoming an entrepreneur, SN Subjective norms, PBC Perceived behavioural control, Ent. Edu Entrepreneurial educational background, Ent. Int Entrepreneurial intention

## 7 Discussion

Entrepreneurship in the present era has become an important domain because of its wealth-creating nature, employment generation and for the economic development of a nation. Developing the entrepreneurial spirit among young has become popular because of unemployment created by the government. India has quickly become a leader in rapidly connecting the energy in the sector and developing an environment that is supporting to entrepreneurs with incubators, mentoring, and providing financial support. But still most of the literature available in the field of entrepreneurial intention came from Europe and other Western countries. Social set-up and environmental factor affecting the process of entrepreneurship is very different in this part of the world as compared to the factors covered in the existing research studies. This paper tried to bridge the gap and validating the entrepreneurial intention model in the Indian context. Ethnically, India has possessed a unique set of sensitivities and socio-psychological blockades. Therefore, identifying the validity of the antecedents affecting entrepreneurial intention in the West and other developed European countries consider as an appropriate way before adopting it in the Indian context. Thus, in this paper, we tried to examine the effect of entrepreneurial education, attitude towards becoming entrepreneur and subjective norms in predicting entrepreneurial intention among undergraduate students in the Indian context. This research study fills gap in the existing literature related to entrepreneurship education by testing the effect of entrepreneurial awareness education and start-up education on entrepreneurial intention in India. Most of the premier higher education institute in India promotes entrepreneurial activities through “Centre for Entrepreneurial Learning” and various specific courses related to entrepreneurship education. This paper aims to identify and examine the role of entrepreneurial education and the theory of planned behaviour in predicting entrepreneurial intentions and seeks to understand whether and how entrepreneurship education affects the intention of the students in India. Results indicate a positive relationship between entrepreneurship education and entrepreneurial intention. The finding validates the effect of entrepreneurship education on entrepreneurial intentions and also encourages academicians to develop courses on entrepreneurship and to increase the entrepreneurial intentions among their students, as entrepreneurial education is a very vast field. The work on entrepreneurial

education is very diverse. It starts with the argument of “what is entrepreneurial education”? and “how entrepreneurial education effects entrepreneurial intention”. This study facilitates to test the role of entrepreneurial education in predicting entrepreneurial intention of students of premier technical higher education institute in India. Total variance explained by the model is 57%. Similar to various other previous research studies in the field of entrepreneurial education (Kolvereid, Iakovleva, & Kickul n.d.; Krueger et al. 2000; Liñán 2004) where education effects the intention in a positive manner, in this study education effects intention in a moderate way. The theory of planned behaviour is considered as one of the most used studies with the entrepreneurship research. Therefore, it is necessary to test its adaptability in respect to the Indian context. In this paper, the researcher found that all the three factors of the theory of planned behaviour showed a positive relationship with entrepreneurship intention.

This result also highlighted that there is a need to develop an environment that will facilitate entrepreneurial activities so that students feel more attracted and motivated towards self-employment. There is a need for developing an environment and support system that facilitates towards new firm creations. Efforts should be made to involve policy makers and educators at the university level so that they can increase the amount of knowledge and awareness related to start-up activities, so that more and more students are attracted towards such type of activities, for example developing an application-based course where entrepreneurs can share their experiences with students. There is a necessity to involving regional/local development agencies and TBIs (Technology Business Centers) so that students can develop eminence ventures and access to preferential loans. The need of the hour is that to develop an ecosystem that will imbibe students with all kinds of support regarding entrepreneurial activities.

## 8 Limitations

The sample size of the research is very small. Sample of 200 students is not appropriate enough to test the reliability of the research study and is not adequate enough to represent the opinion of all students from different streams. Besides, this research study does not consider age group, because students with different age group think in a different way towards entrepreneurial activities. Therefore, age group is a critical criterion that can be looked upon. Entrepreneurial intention is considered as the first step towards actual entrepreneurial act. This research study tried to test the intention of the students not the actual behaviour. Because testing behaviour is not an easy task, it requires long time to observe actual action. A longitudinal research study is required for this. Researchers do not take into account the influence of social groups on the intention of the students. Pressure exerted from different social groups influences person’s perspective towards looking into particular situation in a different way. It is also proved by various

researchers that social pressure is the most conflicting variable that influences intention formation (Kriethika and Venkatachalam 2014). More advance quantitative techniques can be used for more valid outcomes.

## 9 Scope for Further Research

There is a scope for future research which can include higher education institutions in India with large sample size. So that result can get rid of biasness that can incurred due to small sample size.

Researcher can also take into consideration the collecting responses from final year students as they are much more focused towards their career choice. Besides this, future research can also include birth order as a variable to test the formation of entrepreneurial intention.

In this research study, we only include four antecedents; researchers can also include other variable such as family background and role model (Anderson et al. 2005; Van Auken et al. 2006). Effect of culture (Sajjad et al. 2012) and emotional intelligence (Zampetakis et al. 2009) on entrepreneurial intentions can be taken for future research studies.

At last, besides testing social entrepreneurial intention researchers can also conduct a retrospective study of entrepreneurs that will validate the relationship of antecedents and the intention formation towards entrepreneurship moderated by motivational factors, among students.

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**Part III**  
**Experiments with Pedagogy**

# Chapter 10

## Competency Mapping as a Powerful Tool for Value Creation in the Entrepreneurial Education

Anita Walia

**Abstract** In India, organizations have been conducting the exercise of competency mapping, but it still remains an unexplored process in the education sector despite the growing level of awareness. When it comes to entrepreneurship education, a structured effort to build entrepreneurial competencies helps yield results. Here, an important question arises “Are good entrepreneurs born that way, or can entrepreneurial skills be taught?” This is where it becomes imperative to correlate basic competencies of students with the specific competencies required to be an entrepreneur. The paper proposes a competency-based education (CBE) model which focuses on the identification of the “competency clusters” relevant for different types of professions including entrepreneurship. The follow-up study describes how a competency-based education model can be effectively used to integrate related knowledge, skills and attitude that are observable, measurable, and necessary to perform a job independently at a prescribed proficiency level. Based on findings, the paper gives suggestions as to how a good “competency-based education system” can help in developing an action-based curriculum especially for an entrepreneurship course.

**Keywords** Basic competencies · Competency-based education model · Entrepreneurial education · Socio-economic environment

### 1 Introduction

The current education system, especially in entrepreneur education is one where a student moves through the necessities of the curriculum by taking a course and being evaluated at the completion of a semester on how well he/she has performed meeting the necessities of the course. It does not prepare them to face the challenges of the real world. The graduates and the postgraduates that are produced from the

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universities are found to be ill-equipped to handle the challenges of the business world. Therefore, it is crucial to cultivate the talents and abilities of the students and further develop their potential by assessing their competency. Education experts and educational service providers (teachers) have been struggling to design a systematic way of mapping student competency in order to develop the potential of students so that they are ready to face the challenges posed by an uncertain socio-economic environment. In developing countries like India, making people with entrepreneurial drive and soul can prompt the exponential development in the economy. There is a pressing need to cultivate entrepreneurship drive in the student and excite them to have an ideal model transformation to look at. There is common agreement among entrepreneurial learning scholars that entrepreneurship cannot be taught with the conventional methods like other subjects. They are of the view that conventional methods such as “instructional systems” alone are inadequate to sufficiently create entrepreneurial aptitudes to manage the complexities of maintaining a business and making business opportunities. For this to happen, developing right pedagogical tools is a must. Since entrepreneurs are the pillars of next generation economy for a country, an innovative pedagogical approach is necessary in our education system.

### ***1.1 Competency Mapping***

Competencies can be defined as a bunch of related learning, qualities, disposition and aptitudes that influence the real aspect of one’s responsibilities; that connect with execution at work; that can be measured against decently acknowledged standards; and that can be enhanced through a proper development intervention. Competency is a set of specific personality traits and individual motivations, which extends to knowledge and skills. Competency mapping is a process of recognizing people’s ability and key skills sets required to successfully adopt a profession. Competency mapping can be used to guide educators and trainers in developing curricula that meets the needs of employers on one side and the requirements for those planning to be self-employed on the other.

## **2 Literature Survey**

The concept of competency-based education system was initially presented by the famous Harvard Psychologist David McClelland in 1973. McClelland initiated the movement of competency around the world. His brilliant books “Talent and Society”, “Achievement Motive”, “The Achieving Society”, “Motivating Economic Achievement” and “Power the Inner Experience” have given new insights in the field of competencies.

## 2.1 *Competencies Traits*

The article written by McClelland in 1973 has created a defining moment for competency development. McClelland stated that competencies could help predicting performances, and further, he claimed that competencies were not prejudiced by race, gender or socio-economic factors. Most of the social psychologists associate entrepreneurship with certain psychological characteristics and traits which successful entrepreneurs exhibit. These traits include need for achievement (McClelland 1973), propensity to take risk, locus of control (Brockhaus 1986) and so on. Max Weber analysed that religious beliefs are the driving forces for producing entrepreneurial movement.

## 2.2 *Entrepreneurial Competencies*

Based on the work of Boyatzis (1982), entrepreneurial competencies consist of underlying characteristics possessed by a person which result in new venture formation, existence and/or growth (Bird 1995). These characteristics include common and explicit knowledge, motives, traits, self-images, social roles and skills that may or may not be well-known to the person (Boyatzis 1982). He further added that entrepreneurial competencies are comprised of the entrepreneur's drives, traits, self-image, attitudes, behaviours, skills and knowledge (Boyatzis 1982; Brophy and Kiely 2002).

Johannisson (1991) claimed that a framework consists of five stages of learning: (1) know-what, or knowledge; (2) know-when, or insight; (3) know-who, or social skills; (4) know-how, or skills; (5) know-why, or attitudes, values and motives. Based on this framework, he calls for more related approaches in entrepreneurship education.

Based on various previous empirical studies in entrepreneurial competencies, a framework of basic and specific competencies has been identified for this study. They have been grouped into basic and professional competencies domains for the purpose of analysis and reporting. This framework is a developed version of a framework for learning outcomes in entrepreneurship education anticipated by Fisher et al. (2008), which in turn inclines towards general training evaluation framework proposed by Kraiger et al. (1993) consisting of cognitive (conceptual), skill-based (functional) and affective (attitudinal) learning outcomes.

## 3 *Objective of the Study*

The main purpose of this paper is

- *To highlight the role of competency mapping in Entrepreneurial education.*
- *To identify the gaps between the capability of students and the specific competencies required to be a successful entrepreneur.*

- *To propose a competency-based education (CBE) model for development of entrepreneurial competencies.*
- *To give suggestions for the development of an action-based entrepreneurial curriculum.*

## 4 Research Design

**Research design** Exploratory

**Type of data** Secondary data

**Sources of data** Books, Journals, Magazines, Internet, etc.

## 5 Entrepreneurship Education

The education framework assumes an essential part in the advancement of the human resource needs of the country which in turn leads to economic advancement of nations. The traditional entrepreneurial education system does not provide enough encouragement to students to think and own responsibilities of developing themselves as successful entrepreneurs. There is a need to outline educational programmes which concentrate on the improvement of abilities needed to produce an entrepreneurial outlook.

As indicated by “Special Report: A Global Perspective on Entrepreneurship Education and Training”, GEM, 2008, entrepreneurship education is characterized in wide terms as the building of information and abilities with the end goal of business by and large, as a feature of perceived training projects at essential, auxiliary or tertiary-level instructive establishments. Entrepreneurial training is frequently arranged into three methodologies (Johnson 1988; O’connor 2013; Heinonen and Hytti 2010; Scott et al. 1998). Instructing “about” business enterprise implies a material laden and hypothetical methodology expecting to give a general understanding of the trend. Educating “for” business entrepreneur implies an occupationally arranged methodology which guarantees the necessary information and aptitudes. Educating “through” means a procedure-based and regularly experiential methodology where the student experiences a genuine entrepreneurial learning methodology (Kyrö 2005).

According to one of the research reports conducted by an expert group on “entrepreneurship education” by European Commission, there was a general recognition of the importance of including within its definition two different elements:

1. ***Entrepreneurial mindset***: A broader concept of education for entrepreneurial mindsets and skills, which involve developing certain characteristics, intentions,

qualities or methods, personal qualities for considering and is not directly focused at creation of new businesses and

2. ***New venture creation***: A more specific concept of training on how to create a successful model of business. Entrepreneurship education is designed to concentrate all the more on the particular connection of setting up a wander and getting to be independently employed (QAA 2012; Mahieu 2006).

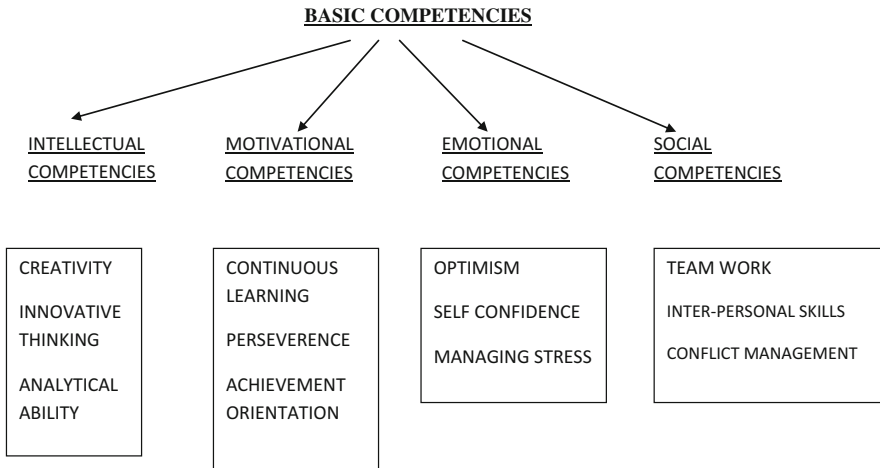
It develops entrepreneurial skills and facilitates entrepreneurial activities which prepare students for the realities of life. It also empowers students to enhance their social and life skills as they are in a better position to apply entrepreneurial competencies in daily life. Entrepreneurship education is learner focused, process based and socially relevant which makes it more oriented towards behavioural and affective skills rather than focusing only on cognitive skills.

### ***5.1 Entrepreneurial Competencies***

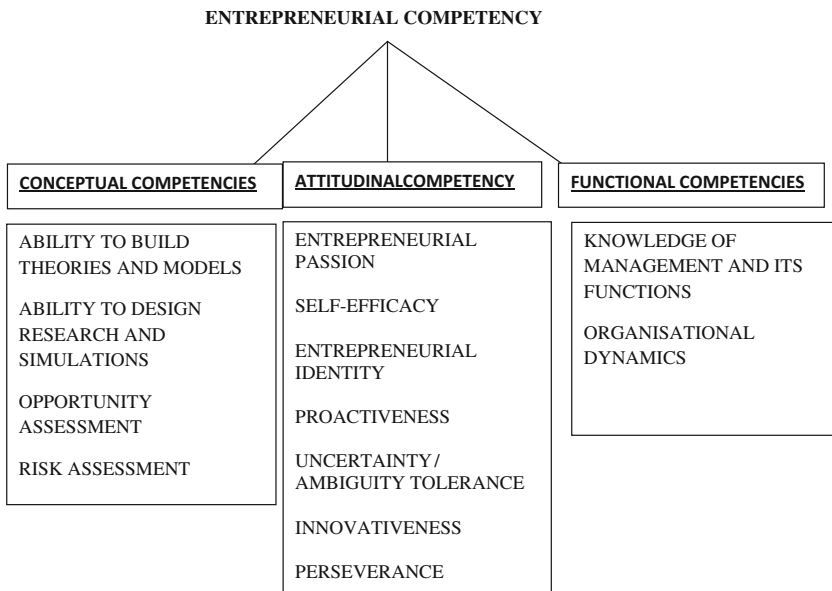
Entrepreneurial abilities are characterized as hidden attributes possessed by an individual which bring about new venture creation, survival and/or development (Bird 1995). These qualities incorporate non-exclusive and specific information, thought processes, attributes, mental self portraits, social parts and aptitudes that could conceivably be known to the individual (Boyatzis 1982). In view of the fact that the entrepreneurship includes capacity for new venture creation, it is important that business person's competency is exceedingly a basic component in attaining perfection in execution. This is so as an entrepreneur constantly works for always meeting expectations for sustainable development and success of a business venture in the midst of an aggressive business environment. The significance of entrepreneurial competency has seen an upward trend amid the recent decades it is high time that educational institutes work on identifying and filling in the gaps that exist in the student's capability and the specific competencies required to be a successful entrepreneur. Consequently, the final objective of all entrepreneurial education ought to be to develop understanding, skills and aptitudes that are portrayed as particular practices and are required for successful execution of a genuine business world errand or movement.

### ***5.2 Types of Competencies***

In any profession, competencies can be categorized into two categories—basic and professional competencies. Basic competencies are those competencies which are common for all professions and are found in each individual in varying degrees. These competencies should be tested at the entry level, that is, when the student enrolls into the course.



**Entrepreneurial competencies** are job related and are important when the student enters the business world. The specific competencies required by entrepreneurs are listed below. These should be tested throughout the learning stages of a student’s stay in an institute.



### ***5.3 Development of Entrepreneurial Competencies***

The following section proposes development of entrepreneurial competency through a competency-based education model which is centralized around the learning outcome of the input evaluation. Competency-based education (CBE) addresses what the learners are required to do instead of what they are relied upon to look into. Competency-based education is a practical methodology to education that focuses on particular abilities and assesses expertise on those skills as indicated by real learner execution.

### ***5.4 Competency-Based Education (CBE) Model***

The main objective of competency-based training model is to concentrate on the advancement of fundamental and entrepreneurial skills of students by integrating related learning, aptitudes and state of mind that are detectable and measurable and important to perform a work autonomously at an endorsed capability level. The CBE system is a step towards establishing a connection with the real world where the student knows upfront what the expected learning outcomes are and each student is expected to fully demonstrate them all. Competency-based education aims at periodically reviewing student competencies at various stages of learning with the help of assessment tools (SPCI) and based on the gap analysis works on providing them necessary training and development to hone the requisite competency.

## **6 The Process of Competency Mapping Can Be Carried Out at Two Levels**

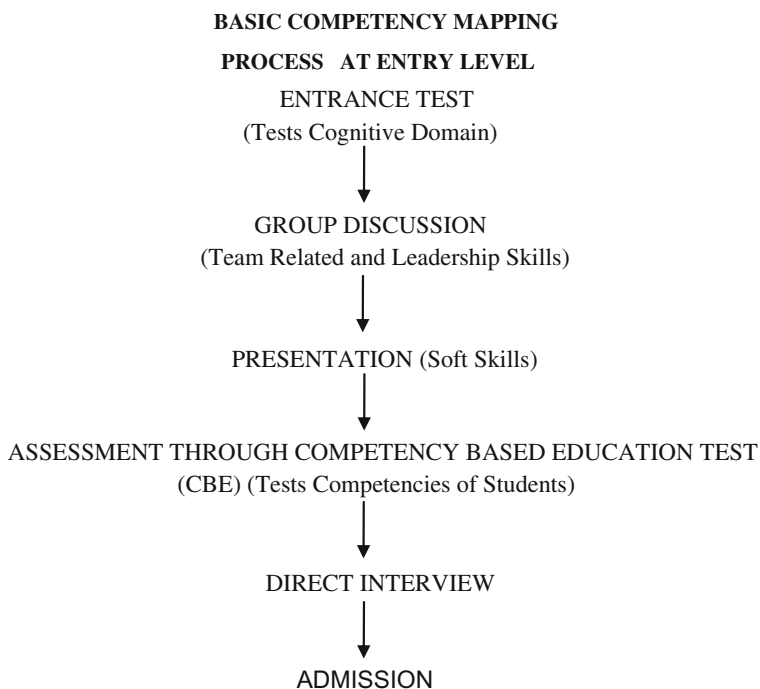
- **LEVEL 1**—The first is at the level of a **student entering into entrepreneurship education** where the student is oblivious of his future and lacks the competency to take on any businessman role.
- **LEVEL 2**—The second is **throughout the learning stage** of a student's academic stay as student.

## 6.1 LEVEL—1: Mapping Student Competency at the Entry Level

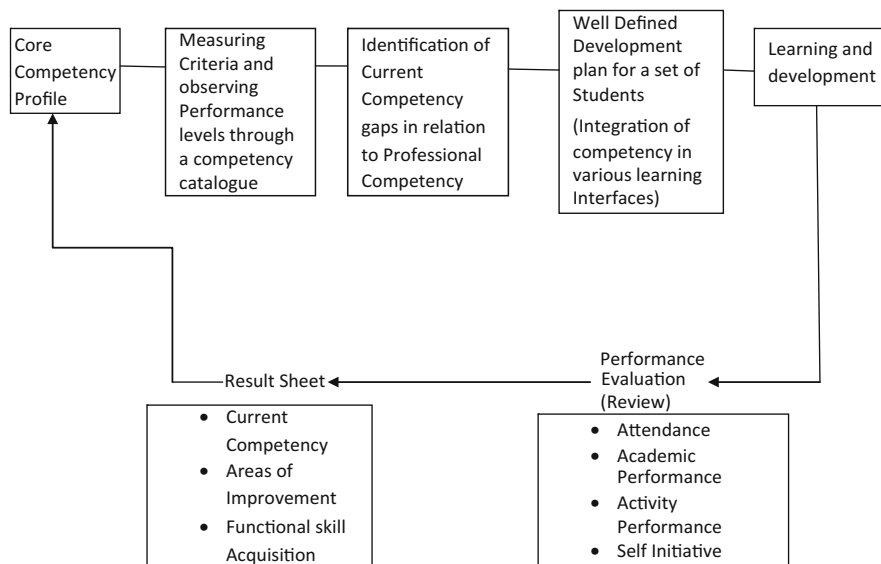
The abilities of the students are related to a cautiously planned exam which tests the essential competence of the student in verbal ability, reasoning and familiarity with the surroundings. The entrance test helps in mapping the basic competencies of the students. This can become a basis for preparing a competency profile for each student so that a proper competency-based development plan can be carried out according to the individual needs and requirements of students. The process of competency mapping which can be carried out at the entry level to measure the basic competencies of the students is shown (Fig. 1).

### 6.1.1 Development of Desired Competency Throughout the Learning Stage

The approach suggested in this study is “teaching-through” which an action-based education programme is. After measuring students’ basic competencies through entrance exam, “core competency profile” for each student is prepared. Based on



**Fig. 1** Competency mapping process at entry level



**Fig. 2** Working of competency-based student development programme

the competency profile, identification of current competency gaps in relation to professional competency are carried out. All students will initially undergo a similar kind of development programme tailor-made for the development of all the skills regardless of their competency levels.

### 6.1.2 Competency-Based Student Development Plan

This plan spread out over a course period which helps the student to

- Work on their personal strength
- Reinforce domain knowledge
- Improve interpersonal Skills
- Acquire new Functional Skills (Fig. 2).

## 7 Action-Based Curriculum

It has been a point of discussion that formal education does not encourage creativity and entrepreneurship and prepares students only for certain aspects of the corporate domain. It is high time that education system reorients itself to the content and teaching methodology that fosters entrepreneurship. It should be noted here that merely changing the content will not be sufficient. Rather, a culture reflecting



imaginative thinking has to be developed among students. Action-based entrepreneurship education focuses on learning-by-doing. This requires that a learner makes a deliberate effort to enhance skills and build up a positive attitude by involving himself/herself actively in the process of learning.

Therefore, the main area of concern for “entrepreneurial education” should be to inculcate the knowledge of setting up a business, getting independently employed and working on skills required to survive in a constantly changing business environment. Researchers indicate that learning concepts and being involved in experimentation leads to better outcomes and enhances entrepreneurial predisposition (Gorman 1997). It has been projected by researchers that entrepreneurial education should comprise important components such as effective leadership, ingenious thinking and an insight into innovations in the technological arena (McMullan and Long 1987).

It is therefore suggested that critical aspects of entrepreneurial education should incorporate enterprise into the classroom environment clubbed together with teaching pedagogy which stimulates enterprising aspects in students. This study proposes an action-based entrepreneurial education curriculum which has a proper blend of business skills and entrepreneurial traits described (Table 1).

### **Process for Competency Development**

The student performance report card (SPR) is a point-by-point report given to every student which reflects his current capability, improvement required and the information and aptitude showcased in his/her region of specialization. This is to be taken as information by the students for future advancement. It is a manual to empower the students to concentrate on different abilities that will make him effective as his/her profession advances.

## ***7.1 Level 2—Competency Mapping Throughout the Learning Stage of a Student’s Academic Stay as Student***

### **SPCI Tool**

The method used for measuring and comparing the competencies at different stages of learning is the student professional competency indicator (SPCI) tool. This tool will help in mapping the students’ current level of skills and would help in determining the specific skills they need to develop to excel in their respective profession and will also outline those areas in which they need to be trained. The outcome of the analysis is mapped using skill matrix table (Fig. 3).

### **Skill Matrix Analysis**

Skill matrix is an assessment tool to identify exactly where the students stand in terms of their “competency level” in each domain that have been defined on the basis of marks obtained. Skill matrix is a Table 2 that clearly shows skills held by

**Table 1** Process for competency development

S. No.	Student development centre activity	Methodology
1	Developing a core	Continuous evolvement of skills
	Competencies profile	
2	Define the competencies, measuring criteria and performance levels	Competency catalogue/dictionary
3	Identification of current competency gaps in relation to professional competency	Competency mapping at the various learning stages throughout the academic stay of the students at the institute
4	Integrate the competencies in various learning interfaces	a. Learning-by-doing
		b. Building courses in negotiation, leadership and new product development
		c. Experimental learning lab (trial and error)
		d. Achievement motivation training (IIMA)
		e. Mentoring pools like TiE, and networking events
		f. Assessment centre
		g. Incubation centres
		h. Projects and key assignments with start-up
		i. Internships programmes
		j. Interaction with entrepreneur
		k. Mentoring and coaching
		l. State-of-the-art communications technology to interact with members of industry and experts worldwide
		m. Business plan contest
		n. International collaboration projects
o. Tests and examinations		
5.	Identify and define developmental plans	Internal and external training programmes
		In house mentoring and coaching programmes
6	Monitor the development	a. Attendance (classes, workshops and guest lectures)
		b. Academic performance (both internal and external evaluation)
		c. Submission of assignments, project reports and capstone
		d. Code of conduct and adherence of discipline
		e. Initiativeness towards self-development
7	**Produce a performance report card (both academic and soft skills)	Integrated self-development plan of each student which features:
		a. Current skills
		b. Areas of improvement
		c. Domain knowledge

\*\*Note that report card include both academic and soft skill evaluation report

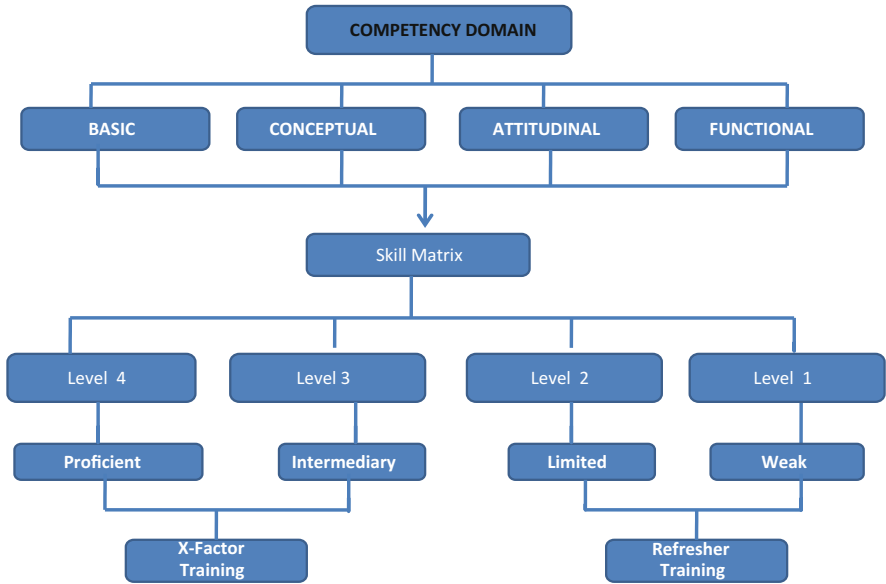


Fig. 3 SPCI process of mapping entrepreneurial skills

the students which provide comparison between the available and the required level of competencies (Table 3).

**Level 4 (EE): Exceeds Expectations—Rating 4**

Students who have exhibited at least 10 competencies come under this category. This indicates he/she has exceeded expectations in all essential areas of required competencies, and the quality of work overall was outstanding.

**Level 3 (ME): Meets expectations—Rating 3**

Students who have exhibited at least 7 competencies come under this category. This indicates that his/her performance consistently meets expectations in all essential areas of required competencies, and the quality of work was overall good.

**Level 2 (I): Improvement Needed—Rating 2**

Students who have exhibited at least 4–5 competencies come under this category. This indicates that his/her performance does not consistently meet expectations in all essential areas of required competencies, and the quality of work needs improvement.

**Level 1 (U): Unsatisfactory—Rating 1**

Students who have exhibited less than 4–5 competencies come under this category. This indicates that his/her performance does not exhibit reasonable progress.

**Table 2** Skill matrix process

Skill	Name	
	Amit Shah	Nikita Jain
Creativity	✓	✓
Innovative thinking	✓	✓
Analytical ability	✓	
Continuous learning		✓
Perseverance		
Achievement orientation	✓	
Optimism		✓
Self-confidence	✓	
Managing stress		
Team work		✓
Interpersonal skills	✓	
Conflict management		
Ability to build theories and models	✓	
Risk assessment		
Ability to design research and simulations	✓	
Opportunity assessment	✓	
Entrepreneurial passion		
Self-efficacy	✓	
Entrepreneurial identity	✓	
Proactiveness		
Uncertainty/ambiguity tolerance	✓	
Innovativeness	✓	
Perseverance		
Knowledge of management and its functions	✓	✓
Organizational dynamics		
Total	15	7

**Table 3** Performance evaluation and rating scale

Exceeds expectation (EE)	Meets expectation (ME)	Improvement needed (I)	Unsatisfactory (U)
Level: proficient	Level: intermediary	Level: limited	Level: weak

## 7.2 Performance Improvement Plan for the Group of Students Who are at Level 1 and Level 2

**Refresher Training:** Developing refresher programme to improve the knowledge and skills of the students through the following methods:

- Diagnose individuals’ weakness, areas of improvement and gaps in relation to a set of competencies.
- Ensure there is a defined set of refresher developmental plans for bridging the gaps.
- Provide a platform for future development through continuous mentoring (by teachers as well as by an outstanding senior student).
- Target coaching till the achievement of the desirable result.

### 7.3 Performance Improvement Plan for the Group of Students Who are at Levels 3 and 4

X-factors: developing an integrated programme in collaboration with the industry through

**Table 4** Assessment and development of competencies in the curriculum

S. No.	Student assessment and development methodologies	Critical competencies assessed
1	Evaluation of these competencies through personality projection test and through creating Thomas profile hiring test method and critical incident method and developing these competencies through sensitivity training, behaviour simulation, mentoring and coaching, counselling, assessment centre, interviews with entrepreneurs and the use of video and films	Entrepreneurial passion Self-efficacy Entrepreneurial identity Proactiveness Uncertainty/ambiguity Tolerance
2	Identify competencies through aptitude test, achievement test and business simulation gamification process and business plan development contest and developing these competencies through projects and assignments (internship research projects with start-up, written assignments), experimental learning, action research, assessment centre, case analysis, in basket method, business plan development under mentor, environmental scans; skill-building courses in negotiation, leadership, new product development and creative thinking	Ability to build theories and models Ability to design research and simulations Opportunity assessment risk assessment
3	Evaluating these competencies through written test, case study method, group exercise and developing these competencies through experimental learning method, business incubation centre, business simulation games, lectures and projects and assignments (internship research projects, written assignments), student business start-ups; consultation with practicing entrepreneurs; computer simulations; interviews with entrepreneurs, environmental scans; “live” cases; field trips and the use of video and films	Knowledge of management and its functions Organizational dynamics

- Various experimental learning sessions, student business start-ups, consultation with practicing entrepreneurs, computer simulations, behavioural simulations, interviews with entrepreneurs, environmental scans, “live” cases, field trips and the use of video and films.

The assessment and development methodologies one can use in the curriculum are given in Table 4.

## 8 Conclusion

The main aim of competency-based model of education is to create the abilities and capacities of those students in relation to the point of interest, as opposed to attempting to case them consistently into a standardized, subject-based assessment. Hence, a good competency-based education system can prove to be advantageous over the existing academic system in the following ways

- Helps students pick up a clearer idea of business in today’s focused business sector.
- Ventures an appearance as a “bleeding edge” and decently arranged business visionary, who has taken the time to look into capabilities, examine those sought after and map his/her own skills.
- Exhibits self-assurance that originates from knowing one’s potential all the more convincingly, and from having the capacity to lucid those favourable circumstances in particular dialect.
- Creates the ability to contrast one’s real skills with an organization or position’s needed/favoured capabilities so as to make an individual development map.

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# Chapter 11

## Generating New Venture Ideas: The Use of ‘Consciousness of Abstracting’ in Entrepreneurship Education

Priyanka Pareek and Manju Singh

**Abstract** There has always been a debate between various methods of teaching for entrepreneurship learning. Present higher education system follows prescribed pattern of curriculums. The need is to provide opportunities to have advanced thinking to understand what is happening around us. The advanced thinking involves consciousness of abstracting a principle of general semantics. The essence of practicing consciousness of abstracting will come out when an entrepreneur will be able to ponder over ‘How to develop an idea’. Primarily based on the literature review and heuristic microstudy with six focus groups, this paper attempts to understand the importance of consciousness of abstracting in improving the quality of entrepreneurship education.

**Keywords** Consciousness of abstracting • Entrepreneurship • General semantics • Heuristic microapproach • Quality education

### 1 Introduction

Entrepreneurship is a subject and a discipline which can be learned through a regular practice. It is neither a magic nor a hereditary that comes with generations (Drucker 1985). The personality traits of an entrepreneur are not hidden in his physical appearance but in how he handle things altogether. Innovation, recreation and making far-reaching changes are the basic qualities with which an entrepreneur works to make new changes in the old industry with the use of updated technology, material supply and other sources (Schumpeter 1952). The qualities of a successful

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entrepreneur come with time, experience and how an individual was been taught a subject in the institution.

Educational institutions in India are attempting for entrepreneurship education with an aim to develop technical competence within the field of business and management. There is a need of an initiative to nurture young minds with the process of mental competence.

Institutions may help them to ponder over the basic questions of thinking, identification of an idea, transforming ideas into action, and the most important abstracting the things around is also essential for entrepreneurial learning. Other teaching strategies such as classroom teachings, industry exposures and case studies encourage an individual to be an entrepreneur. But basically, idea is an abstract entity which requires to be developed through observing and abstracting things creatively.

Enhancing entrepreneurial skill development, entrepreneurial literature, systematic theories are the necessary aspects in education, and the inclusion of applications of consciousness of abstracting may help the entrepreneurs to be more creative. This practice of curiosity and creativity begins with the childhood activities where an inbuilt machine keeps on asking the curious questions of What, How and Why. Generally, learners focus on the set pattern of education in the form of syllabus that prepares learners for simple mechanical output without losing any creative ideas and concepts. Rather they make efforts to achieve performance in terms of maximum scores. This competitive environment somewhere blocks thinking which results in the creation of a void.

The process of abstracting starts with the generation of a thought which is an initial step for the students to establish their enterprise, following a process in which human mind plays an important role. Out of the number of thoughts, it selects an ideal thought to work upon. It constantly restructures itself with the experiences which are the results of what an individual sees, hears, smells and feels. This long process of categorizing on different levels is termed as consciousness of abstracting. It serves as an important factor in the quality education of entrepreneurs that facilitates the understanding of the process of refining an idea and organized growth of creativity of an entrepreneur.

The process of innovation and creative thinking should be taught to the budding entrepreneurs for their capacity building (Kuratko 2003). It can be understood and practiced more clearly by working on the different levels of structural differential model of Alfred Korzybski. Entrepreneurs should learn it to understand the scientific process of experiencing. The identification of this model in the curriculum can greatly facilitate the deeper understanding of the subject to students. It may help the students of entrepreneurship to develop an idea into an abstracted concrete reality and hence can contribute in their quality learning.

This paper is an attempt to understand the application of consciousness of abstracting that may be used for improvement in entrepreneurship education. Also it reflects the insight into the shift in the mindset of entrepreneurs that may be influenced by practicing consciousness of abstracting. This might be a significant

pointer for enhancing the quality of education in entrepreneurship and will provide insights into the stakeholders including policy makers in the field of higher education for entrepreneurial development.

## **2 Review of Literature**

### **2.1 *Entrepreneurship***

The inner inspiration Anterprerna of Sanskrit involves the common characters with the word entrepreneur (Charantimath 2006). The inner inspiration comes when the world around is been looked, as rightly said by Thomas Alva Edison 'I find out what the world needs. Then, I go ahead and invent it' (Beals 1997). The invention and innovation by an individual after observing, innovating and understanding the opportunities for others according to the 'need' to create an enthusiastic venture environment makes him a successful entrepreneur (Kumar 2012). But a successful entrepreneur has to face many challenges when it comes to the point of progressing at the cost of new ideas (Schumpeter 1952). The quality of 'sensing opportunities' makes them different from others who see only chaos and confusions (Sadler-Smith 2010). So it is essential for every budding entrepreneur to be trained by their instructors accordingly.

Entrepreneurship is a subject with practical approach which starts with the generation of ideas. In most of the foreign universities, emphasis is given on the creativity of students. Students involvement in writing business plan in Ball State University focuses on both theoretical approach and 'real-world' understanding in Kennesaw State University, developing realistic methods in Miami University, UVIC Entrepreneurship Program in University of Victoria, identification, assessment and creating business opportunities through the Berger Entrepreneurship Program in University of Arizona at the undergraduate level all contribute in developing practical knowledge (Kuratko 2003).

### **2.2 *Quality Education***

In Chicago, students are trained to be smarter by explaining the process of taking an idea and to change it into business. They are taught through the 'baby steps' (Chicago Tribune 2008) which help them to understand the future aspects with more of their own intuitions (Fiet 2000). The world and ideas are running fast in this globalized world; it is better to be original and innovative to cope up with the same speed (Branson 2007).

In India, the limit of entrepreneurship education lies within the classroom teaching, case study analysis and industry visits. Most of the universities start with the basic education of entrepreneurship and goes deep inside the curriculum within

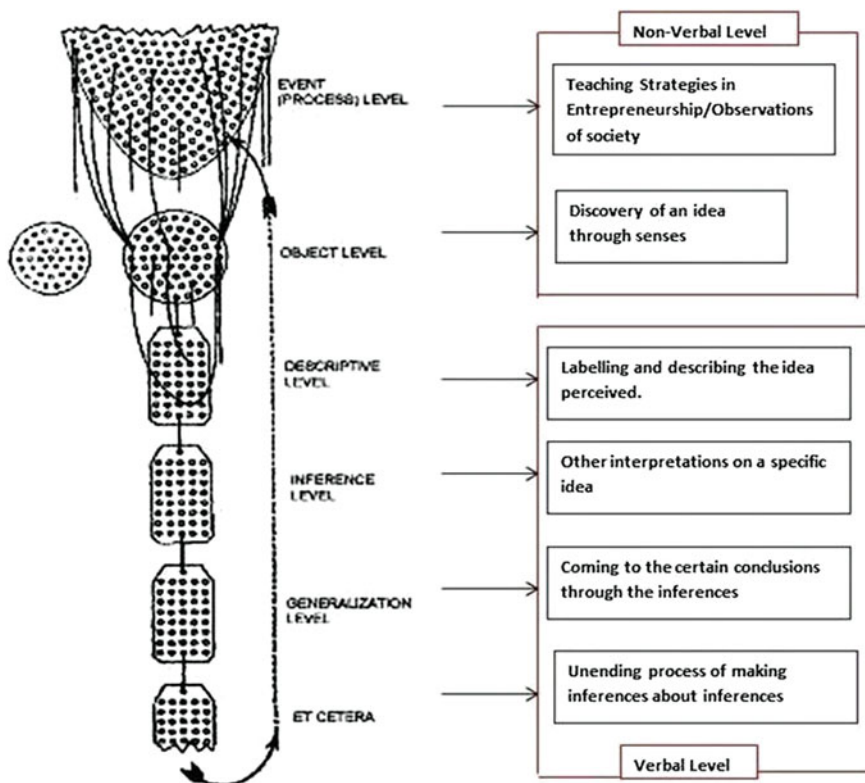
the time frame which need to be improved. Even most of the entrepreneurship researches have focused on explaining different aspects of the subject. Instead of this, there should be a theory that can make entrepreneurs that much creative to make predictions. The present theory lacks the ‘theoretical rigour’ that results in the lack of reading interest among students (Fiet 2000). To advance in the field of entrepreneurship, the important factor is to encourage oneself for the coming opportunities to bring the change in this sector. Change happens with the change in thought process. It is an attitude which comes after knowing self. There is a need to take decision at every step that is concerned to the feelings, confidence, courage, habits and basically the mental strategy (McGrath and MacMillan 2000).

The contributors to the quality education of entrepreneurship are expected to be perfectionists in the use of advance technology such as video conferencing, video case studies and teaching through live examples. This is the requirement of present generation of students (Kuratko 2003). Such organized methods of teaching can help an individual to abstract and think of inferences indefinitely. This creative thinking occurs as a part of innovation process (Cerne and Jaklic 2013). An individual can cover a complete journey from perception to evaluation and finally to the action and reaction with a deep thought of ‘so what’ as a relevant question after learning structural differential model (Stockdale 2009).

There is a need to give students the insights into entrepreneurship to enable them to proceed with clear sense of their role in society (Rehman and Elahi 2012). They may understand this by learning the process of experiencing through structural differential model. Educators should acknowledge the relevance and existence of inner and outer worlds of human being which takes the decisions together. This will result not only in the self-awareness but also in their better association with concepts and situations of the society (Lauer 1967).

### ***2.3 Consciousness of Abstracting***

With reference to the above-mentioned problems in the quality education of entrepreneurship, there is a need to understand the process of experiencing which is termed as consciousness of abstracting. It is a disciplined way of thinking. This is further explained through the structural differential model developed by Alfred Korzybski. The first two levels of the model (Fig. 1) fall under the category of non-verbal or silent level where students have observation about their surroundings. At one stage, they may think of ‘knowing’ things as they can smell, hear, see and can feel them. It leads to the descriptive level where experience results in the clearer phenomenon. This level is the initial verbal level where they abstract one from many and convey through words. Resulted experience leads to the inferences which initiate the process of generalizations. This process of inferences and inferences after inferences goes on forever giving rise to the last level, i.e. et cetera. This helps in abstracting the ‘object’ which is correct, appropriate, different from others, unique and identical (Kodish 2011). There is a need of abstraction and



**Fig. 1** Process of abstracting an idea through structural differential model (adopted from Kodish 2011)

understanding as mentioned by Davidsson (2005) who consider ‘abstracted concepts’ and ‘specified relationships’ as the two important elements in deeper understanding of an idea. Bateson (1956) states, ‘We live in a universe of namables. Within that universe we make classes’.

In this universe of categories, students tend to look at the things they perceive with their point of view. They look at the things happening around them. Through observation, they understand the need which leads to the development of an idea. For example, a person A on silent level observes that there is a boom of superheroes in the market. One or the other kid is interested in buying things that have imprints of superheroes on them. Observing this on that silent level, he came up with an idea of start-up in which he can design bookmarks with prints of superheroes on them. This leads to the development of idea through senses. With the sale and product popularity, ‘A’ with more of his interpretations develops T-shirts, pens, mobile covers and other useful items with same prints. Success behind the idea will lead to more inferences and hence more successful outcomes. This abstraction of an idea out of number of ideas is termed as consciousness of abstracting.

## 2.4 Key Drivers for Enhancing the Creativity

Literature survey identifies the important components of consciousness of abstracting. It can have positive impact on enabling the students of entrepreneurship to understand the process of experiencing. This will facilitate quality education.

McGrath and MacMillan (2000) questioned that from where does the thought takes birth in mind. It is an initial step of transforming targets and aims into action. A man becomes an entrepreneur when makes himself aware of the continuous abstracting of the experiences faced which requires continuity. As quoted by A.P.J. Abdul Kalam, 'Excellence is the continuous process and not an accident' (Times of India 2012). Teaching the process of perceiving ideas to the students through the event level can help the students to easily jump to the next level consisting of sub-microscopic level with which mind remains unconscious (Kodish 2011). Mind recognizes the gap which leads to another silent level or object level. So, an entrepreneur should be familiar and focused with the need and efficiency of a particular product in the society. This requires active senses that can predict what is happening around them.

Understanding things through senses creates a 'paradigm shift' in the ways the object is been perceived (Turner 2002). This could be easily seen in the case of Sir Isaac Newton who while sitting in his garden realized that something fell on his head. His senses gave birth to the world-known theory of gravity which he later applied on the planets and Moon (Ayan 1997). Experience leads to ideas, and ideas leads to actions. The journey from experience to idea is covered through senses (Turner 2002). Human beings can think about their experiences in one or the other way using senses—making visual images or by thinking in sound (Robinson 2001). Teaching such processes through variety of strategies can help a student to develop an idea.

Portraying an idea is an important aspect in abstracting an idea for an entrepreneur. Idea is an abstract thing which needs to be objectified (Turner 2002). This happens at the descriptive level. For an entrepreneur, it is an important level to understand. Abstraction of idea is done on a silent level through non-verbal identification with the help of senses (Korzybski 1994). It needs to be presented through words. The growth of sincere thinking leads to the growth of more clear abstracted idea. A clear and a bigger picture in mind helps to portray our ideas in reality (Kodish 2011). The curiosity and the feeling to go deep inside the future benefits lead a student on the path to success contributing in their capacity building.

Reorganization after recognition occurs when something with the first view in subconscious mind makes the conscious mind aware by looking it again (Kodish 2011). This is termed as experience. Through reorganization and self-observation, students can become aware of the life happenings (Turner 2002). Students of entrepreneurship should be made to learn this process which can enable them to adapt in that situation for which their innate behaviour also plays an important role (Chance 1999). Reorganizing is a kind of mission that should be accomplished by the entrepreneurs.

As an entrepreneur has the quality of upgrading the product with time and changing technology (Danannavar 2010), there should be an upgradation of ideas

too. This could be done by making inferences. Deriving inferences is like deriving or examining other factors in reference to the idea which was been thought. This helps in reaching to a conclusion or to understand facts based on the logical evidences (Kodish 2011). As quoted by Thomas Alva Edison for inventing a light bulb 'I have not failed. I've just found 10,000 ways that doesn't work'. More attention should be paid on future aspects by abstracting through inferences for the detailed refinement of the concept. This can explain things and could be tested by its applications (McNeal 1952).

It includes the 'non-allness' characteristic where a human being is considered as not having the complete information of anything. They keep on adding new things about a particular time, object or anything (Korzybski) and finally reach at the level of *et cetera*. *Et Cetera*, a Latin phrase used by writers to express the end of a continuous thought which includes other things but everything cannot be expressed. The same applies for a human mind too which keeps on thinking. The ideas are unending. This addition of information without the use of 'is' of any idea is termed as *et cetera* (Kodish 2011). This can help an entrepreneur to think of other ideas to establish their business more efficiently. Teaching it to the students of entrepreneurship can help them to generate an idea to think about their concept from different dimensions.

### 3 Research Design

This paper has attempted to understand the application of consciousness of abstracting that can be used in understanding the process of generating an idea in the entrepreneurship education. Also it has tried to have insights into the shift in the mindset of entrepreneurs which can be influenced by practicing consciousness of abstracting. This conceptual paper is based on extensive and systematic literature review that includes selected seminal papers on the subject. Additionally, a qualitative heuristic microstudy with the target group of postgraduate students, faculty members of entrepreneurship education was carried out in an institution of higher learning in India.

Six focus group discussions were carried out with postgraduation students, research scholars and budding entrepreneurs to fully explore the views, beliefs and experiences on entrepreneurship training and teaching. Microstudy was conducted during the month of November 2014. The study included 6 focus groups. Each focus group comprise 6–8 respondents including research scholars pursuing Ph.D. in business management and entrepreneurship, business analysts and budding entrepreneurs, postgraduate students. One-to-one interactions were carried out with academic professionals, involved in curriculum development, teaching and training of entrepreneurship. This method was chosen as it is considered appropriate to understand attitudes which vary from person to person (Hurworth 1996). Average time of each focus group discussion was 60–75 min.

Each discussion began with a question that asked individual to share their learning experiences and strategies used during their graduation and school-level education, their benefits, practicality and utilization. This was followed by their familiarity with the concept of consciousness of abstracting and structural differential model. Discussion initiated with one key question ‘What are the essential strategies in teaching entrepreneurship and how they are contributing in nurturing the senses?’ After the wide range of responses, they were asked few transition questions and ended with an important question ‘How you agree with the point that Consciousness of Abstracting is helpful in learning Entrepreneurship?’ The discussion was coded, maintained and transcribed with a review of literature.

## 4 Main Observations

Observations in the focus group discussion reflected that the methods of teaching at school level and graduation level in India includes different strategies. An innovation expert shared that during their graduation days, theory was been taught to them by giving verbal examples in classrooms and analysing case studies gave them the insights into better understanding. In addition to this, a group of post-graduation students contributed to the knowledge by mentioning other strategies which are into practice in the present scenario. With classroom teaching, they have practical learning through the exposure to the industry visits which nurtures the in-depth understanding of entrepreneurship education, guest lecture from visiting faculties helps them to interact regarding their business modules and seminars helped them to have better understanding of the concept with in-depth understanding. Lecturing on a topic is regarded as something difficult as it is not about ‘What we think’ but ‘How we feel’. Lectures should be framed in such a way that it can provide students with direct and indirect experiences (Shepherd 2004).

When asked about the different strategies including the business competitions, scholars pursuing Ph.D. in management mentioned ‘Business Plan competition’ and ‘Brain Storming Idea competition’ which were the main cores of teaching entrepreneurship where students learn in the field and to verify the feasibility of their idea and then they were asked to develop their idea and the best idea was presented. Role play is an effective method to make students imagine, think and behave as the third party (Mercado 2000). Entire curriculum revolved around the business plan. To make students more enthusiastic, creative and innovative, students organize business fare for the junior and inexperienced students. Incubation cell was another better technique used by the educational institutions where students were involved in a new developing venture and company is formed.

There is no evidence found where main focus on the process of abstracting an idea through the experiences is observed. No doubt the above-mentioned technique is highly beneficial for the budding entrepreneurs, but the process of capturing an idea is what we can say is most important and unfortunately which is missing. A business analyst while explaining an entrepreneur said that everyone is an



entrepreneur in their own ways who can think of a better idea, but a real entrepreneur is the one who can contribute in the economy and should create some jobs in the country. He gave an example of a popular roadside vendor in New Delhi, opposite to UPSC on Shah Jahan road who got the audit objection from parliament for not paying income tax as he has established a well-organized and flourishing business. This example of a roadside vendor proves that the person cannot be called an entrepreneur as he is contributing to the country's wealth nowhere. His journey starts from the event level but stops at the descriptive level which allows him to continue his work but the break in the journey of process of abstracting, on the other side stops his journey for getting global exposure.

Giving importance to the idea, one of the respondents gave an example of Karsan Bhai Patel, an entrepreneur who was not academically strong, financially strong and not even strong in manpower but he was strong in his idea. He was aware of the condition of middle-class working people. He got the idea and inferred that for people who earn that much amount of money which is limited to their living, it would not be possible for them to buy a detergent which cost Rs. 15/kg. Later this idea took the shape of a product 'Nirma Detergent Powder' which he started at Rs. 3/kg and presently shares 30% shares of detergent powder and has a turnover of about 3550 crores. So senses helps as a microscope to recognize abstract things more clearly.

After understanding the model of structural differential, one of the respondents shared her thoughts about the unheard model and said that from the merit point of view, it will be beneficial as this topic will focus more on including the speciality in their own ways. Familiarity with such a model would help students to understand how creating ideas are important but what is more important is how to take it forward. Generalizing the whole class would not be entertained but individual-to-individual understanding would be beneficial. It will be a fabric to go through the ideas which will help not only in this generation but also to the generations to come. It will help not only in instigating an idea but also in its stability which is somewhere missing. Deputy director said 'Teaching this model to students can create a higher level of awareness among the students. They could be devoid of fear of failure, setbacks and risks which they face when they enter into a new business'.

This method can be taught to the students by asking them to see the need of the society. Behind teaching the concept and process of digestion in biology, the idea is to make students aware of what exactly happens inside the human body. In the same manner, students may be taught structural differential model to make them aware of the different levels to develop an idea.

#### ***4.1 Effective Learning***

The existing literature gave insights into the curriculum been taught to the students of entrepreneurship at the school level, graduation and postgraduation level. It is observed that extensive exploration opportunities are desired for the students of

India in the growth of their critical thinking and creativity. Familiarity with the process of consciousness of abstracting may encourage an idea how students can create their own path with less obstacles. Discussion through focus group study leads us to the fact that the whole curriculum creating awareness among students revolves around the business plan. There is a limited focus on generating an idea through their experiences. In most of the cases, courses and the titles covered are focused more on managerial entrepreneurship. No doubt the theoretical part is also required but what is more essential is the familiarity with the process of understanding. For this, there is a need to open eyes and to look everything critically with a view to understand and learn.

Like a chess player, a good entrepreneur should be able to make the best of every move. They should be able to capture and plan their whole idea as a brilliant chess player memorizes the image of whole board for further moves. As Albert Einstein said 'Imagination is more important than knowledge to raise new question, new possibilities and to regard old problems from new angle, requires creative imagination and marks real advance in science' (Goodreads 2014). Human beings come across different objects, movements or events that happen around them every single moment of time with which they remain unconscious. It is impossible to perceive everything by a human being. They all have different perceptions and hence perceive things differently. This should be encouraged to be adaptable and innovative for the right direction in which they should proceed (Branson 2007).

It can be interpreted that by practicing consciousness of abstracting, students of entrepreneurship can be more attentive to the events and process happening around them which can provide more opportunities for the further success. Through this, they can improve and correct whatever they observe. It would be an experiential learning for the students for they can understand how to take their innovative idea to the further step. Change in the thought process of the students happens with the way they respond to the things they perceive. But whatever is been observed may not necessarily be the 'real thing' which is the scientific way of looking at the objects. This contradiction gives birth to number of questions which are related to the labelling, composition, difference, observation and the experience of a thing. To answer these questions it is essential to think about 'The Unasked Question' which puts in the way 'What I can do for the greatest good in this situation?' Awareness, ability to respond, quality and quantity of perceiving are the important factors that can contribute to answer these questions (Larcomb 2012).

In India, most of the entrepreneurs generally carry forward their family business. This somewhere results in the limited options of creative and new ideas. Inclusion of structural differential model in curriculum may help student learn to be more organized and encourage far-sighted thinking. There is a need to modify abstract thought with time and situations such as thinking, feeling, understanding and speaking which may push them to sense things with clear and transparent understanding with selection and rejection that goes simultaneously side by side in subtle way. Control of emotions and recognition of an idea are considered as the necessary characters of an entrepreneur.

## 5 Conclusion

The study attempted to add in knowledge regarding different teaching strategies that include different methods of learning through experiences but does not hold any systematic process of understanding. The results suggest that the identification of this model in the curriculum may greatly facilitate the deeper understanding of the subject to students. It can help the students of entrepreneurship to develop an idea into an abstracted concrete reality. Through this, they can be the habitual-trained individual. They could frequently apply their learning in their advanced thinking procedures. The structural differential model should be taught from the school level which is an initial stage of learning new subjects. It is a process that needs to be practiced and exercised which is important for education and development of brain as said by Chanakya (Sharma 2008). By making the students of entrepreneurship practice this process can help them to make inferences through their experience.

The study has some limitations. The majority of respondents selected were based on academic sector which covers only the curriculum-based study. Future research may further prove the results with entrepreneurs, those who got success. Simultaneously, results can also be validated by understanding the thinking and mentality of entrepreneurs who failed in their start-ups. Despite the limitations, the paper gives essential ideas to entrepreneurs as it will lead to the new ideas whose application includes some points of uncertainty (McClelland 1967). This can support the students to prepare themselves in ‘unstructured and uncertain nature of entrepreneurial environments’ (Ronstadt 1990) to evaluate their thought process which can be learned through consciousness of abstracting. Ultimately, it will help to move towards the quality education for entrepreneurs.

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# Chapter 12

## Developing Entrepreneurial Intentions among the Youth: An Innovative Pedagogy based on Experiential Learning

Vincent Varghese and Philcy Philip

**Abstract** This study intends to develop a new pedagogical model for inculcating entrepreneurial intentions among youth by synthesizing the principles of experiential learning, storytelling, improvisation, stress-stimulating training and knowledge transfer approach. The paper is the outcome of an elaborate review of the previous researches in the domain of entrepreneurship education. The proposed model is centred around the reflections of individual's unique experiences and the resultant storytelling blended with stress stimulation by infusing simultaneous rival arguments from other participants. The model further fosters entrepreneurial intentions by using the pedagogy of script-less stage performance according to their spontaneous ideas without any bearing on available theoretical framework. The approach focuses on the immediate flash thoughts of individuals without giving any space for logical thinking in an environment with enough chance for using their intuition guiding action in a spontaneous way. Using the principles of improvisation in a non-traditional learning platform, participants are encouraged to use their spontaneity, ingenuity and inventive thinking. This pedagogy, supplemented with the traditional method based on science component teaching, can be used for revamping entrepreneurship education with an inbuilt inculcation of entrepreneurial intentions among entrepreneurial aspirants.

**Keywords** Entrepreneurship · Entrepreneurship intention · Improvisation · Stress-stimulating training · Storytelling

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# 1 Introduction

In a stuttering economy and amidst negative sentiments in the business community, entrepreneurs who are the key drivers of tomorrow's innovations are the only optimism. Kuratko and Hodgetts (1992) and Fiet (2002) describe entrepreneurship as identifying and grabbing opportunities by innovative ideas or by refining others' ideas and its commercialization by investing required resources and bearing the risk. Many of the researchers are of the opinion that entrepreneurship is a domain with no specific segregation and a theoretical framework (Bruyat and Julien 2001; Ireland and Webb 2007). Entrepreneurship is a multifaceted decision-making game for solving ambiguous management issues (Timmons and Spinelli 1994). Entrepreneurs come up with original creations to steer the chaotic task of owning an enterprise. Entrepreneurs exist to defy conventional wisdom. They are innovative game changers, pioneers, leaders and inventors.

Minniti and Lévesque (2008) note that the historical origin of entrepreneurship can be coined to the use of the word by Irish Economist Richard Cantillon for referring individuals with "a willingness to carry out forms of arbitrage involving the financial risk of a new venture". Long-time researchers focused on physiological traits such as need for achievement and a propensity for risk-taking, in the belief that entrepreneurs were an alien breed from birth. But the data could not produce a strong connection to venture performance.

Shane and Venkataraman (2000) and Schramm (2004) suggest that entrepreneurship is instrumental for economic growth and job creation in global economies by way of development of new products and services. Louw et al. (2003) note that entrepreneurship is a strategy for generating wealth and reducing unemployment in our economies. A solution to the problem of both unemployment and under-employment is entrepreneurship and enterprise creation. The contribution of entrepreneurship industry to the GDP of a country should be recognized and acknowledged by all stakeholders. In a wider context, the pivotal role of entrepreneurship in nation building is yet to be unfolded.

## 1.1 *Entrepreneurship Education*

The mushrooming of university-level entrepreneurship programmes across the world was instrumental in the emergence of entrepreneurship as a separate discipline (Davidsson 2003). Katz (2003) portrayed the sequential growth of entrepreneurship from the inception of the first entrepreneurship programme at Harvard to one of the most sought after courses in the USA. The number of students graduating from entrepreneurship programmes is increasing and also reshaping our understanding of technology, market and management leadership. Youngsters are

inspired by the achievements of successful entrepreneurs like Steve Jobs, Bill Gates, JRD Tata (India), Mark Zuckerberg and Lakshmi Mittal (India), who visualized the future and navigated their enterprises to the forefront of the Industrial world.

Fayolle (2009) highlights that entrepreneurship education is centred around inculcating a mindset to become an entrepreneur and developing competencies such as developing the blueprint of an enterprise, starting a new venture, expanding and refining. Robinson and Sexton (1994) note the significant relationship between education and entrepreneurship and also the role of entrepreneurship education in shaping a successful future entrepreneur. In spite of differences in methodological and conceptual frameworks, there is a consensus among researchers that entrepreneurship education is capable of producing positive effect on entrepreneurial aspirants (Mwasalwiba 2010). Oosterbeek et al. (2010) note that the programme design of entrepreneurship courses may jeopardize its projected outcome. This necessitates the pressing need of revamping the programme design and the pedagogical dimensions of entrepreneurship education.

Scholars, business experts and venture capitalists are of the opinion that age and geographical origin are not capable of influencing entrepreneurial intention. Kuratko (2005) notes that certain dimensions of entrepreneurship can be taught. Fayolle (2007) and Fayolle et al. (2008) assert that entrepreneurship aptitude and temperament cannot be taught. Linan's (2004) categorization of entrepreneurship education programmes is described in Table 1.

Linan's categorization is deficient in programmes for catering the needs of individuals without formal education. The prospective entrepreneurial talents from the strata with lack of formal education and other untapped segments need to be explored.

The literature review of entrepreneurship education revealed a set of teaching techniques (Solomon 2008; Kailer 2009). Mwasalwiba (2010) highlights the focal presence of traditional methods in majority of categorization of teaching methods

**Table 1** Categories of entrepreneurship education (Linan 2004)

Type of education	Purpose	Target group
Entrepreneurial awareness education	Knowledge transfer	Without any previous entrepreneurial background
Education for start-up	Removing the roadblocks in entrepreneurial path	Entrepreneurial aspirants with an idea
Education for entrepreneurial dynamism	Promoting the growth of the enterprise	Those who have succeeded the start-up phase
Continuing education for entrepreneurs	Advanced learner-level training	Seasoned entrepreneurs

which comprise lectures and action-centred innovative learning techniques. In addition to the usual methods, Lonappan et al. (2011) added techniques such as web-enabled learning, video recording and action learning. Blenker et al. (2006) note that teaching method should be selected as per the situation. The teaching method should be chosen based on the teaching objectives, student profile and the student motivation (Carrier 2007; Fayolle et al. 2008). Teaching methods need to be designed in such a way to infuse innovation and creativity coupled with risk-taking. Welter (2008) emphasizes the dominant role of action-centred training techniques in moulding future entrepreneurs. An ideal entrepreneurship curriculum can be configured by blending traditional and modern interactive methods. Jones and Iredale (2010) postulate the significance of experimental learning in engaging entrepreneurial students. There is a lack of consensus among researchers in suggesting a standardized pedagogy for fostering entrepreneurship to the fullest extent possible.

The components of entrepreneurship can be differentiated in terms of teachable and non-teachable components (Rae and Carswell 2001 and Shepherd and Douglas 1997). For effectively supporting the “start-up–survival–success” cycle of new enterprises, entrepreneurship educators should configure the training with a view to enhance the competencies of entrepreneurial aspirants to manage unexpected problems. Teaching of entrepreneurship corresponds to all awareness-raising activities, training and students’ support (Fayolle 2001). Jones and English (2004) suggest that entrepreneurship education should equip the students to identify and grab the entrepreneurial opportunities. Entrepreneurial education should persuade potential entrepreneurs to be better thinkers, risk-takers, innovators who deal with the liabilities of new ventures and manage scarce resources like human capital. Existing pedagogies need to be revamped to meet these core objectives of entrepreneurship programmes.

The massive growth of entrepreneurship education has imposed methodological challenges for all stakeholders in the educational sector (Ferreira et al. 2012). Majority of entrepreneurial aspirants across the globe are in the age groups of 25–34 and 35–44 (Monitor 2014). Entrepreneurship education needs to focus on youngsters without ignoring the chances of the entrepreneurial talents of the aged population. A paradigm shift from science-centred approach to art-centred creative teaching methodologies is required to attract young entrepreneurial novices. The curriculum and teaching methodologies of entrepreneurship must be designed in a unique way so as to cater to the requirements of entrepreneurial aspirants. It is realistic to postulate newer and newer methodologies to revamp the entrepreneurship training sector. We propose to configure a new pedagogical model in such a way to inculcate willingness to start new entrepreneurial ventures.



## **1.2 Entrepreneurship Intention**

Abraham and Shreeram (2003) note that intention is the most powerful precursor of behaviour. Bird (1989) defines entrepreneurship intention as “the entrepreneur’s states of mind that direct attention, experience and actions towards a business concept”. Entrepreneurship scholars have identified a set of factors having significant instrumental influence on entrepreneurship intention. The factors can be classified as personality traits (Henry et al. 2003); education (Mazzarol et al. 1999); education and training (Nabi and Holden 2008); and perceived feasibility (Krueger 1993).

Shapiro and Sokol (1982) explained new venture development in terms of interplay between idea generation, competencies of the entrepreneurial aspirant, risk tolerance capacity, managerial style and level of autonomy. Ajzen (1991) found that planning, coupled with intention to act accordingly, can significantly influence entrepreneurial behaviour. Robinson et al. (1991) note the significance of entrepreneurial attitude orientation and its instrumental role in predicting real entrepreneurial journey in terms of scales of achievement and innovation. Krueger et al. (2000) also highlight that attitude is an important predictor in entrepreneurial intention.

Considering the prominence of factors such as idea generation, risk tolerance limit, attitude, courage and confidence in predicting various phases of an individual’s entrepreneurial journey, teaching methods prevalent in general education and business education courses are not appropriate for entrepreneurship. There is a lack of consensus among scholars in configuring a comprehensive pedagogy for entrepreneurship education. Review of literature in entrepreneurship, entrepreneurship education, and entrepreneurship intention inspires us to think about the need to configure a comprehensive pedagogy for entrepreneurship education. Analysis of entrepreneurial intention models leads us to postulate the pivotal role of entrepreneurship intention on entrepreneurship education. It is plausible to configure an entrepreneurship pedagogy focusing on techniques to enhance the entrepreneurship intention in such a way to foster entrepreneurship. The entrepreneurship pedagogy designed in such a way should be able to inculcate entrepreneurship intentions.

## **2 Pedagogical Model**

A comprehensive entrepreneurship pedagogy is essential for revamping entrepreneurship education with a view to promote new venture creations which can significantly accelerate the growth of global economies. Our aim is to focus on the “how” aspect of entrepreneurship education. A pedagogical model cannot survive in vacuum; it should be in an integrated manner as opined by Fayolle and Gailly (2008). When a new programme is added to a university or an academic

institute, the normal practice is starting an undergraduate programme and then moving on to postgraduate-level programmes. Existing entrepreneurship programmes are conducted in a manner which is common to all other science subjects. In order to revamp the entrepreneurship education, the pedagogy should be reframed. The process of pedagogy reframing requires rethinking of interrelated systems such as “whom” to teach, “what” to teach and “who” should teach.

## ***2.1 Whom to Teach***

Commercial viability of an academic programme is an essential factor to be considered while structuring a course. On the other hand, the target objectives should be fulfilled. Entrepreneurship programmes should be designed in such a way to attract individuals who have genuine interest in the field irrespective of the academic qualifications, social status, cultural background, financial capacity and gender. Courses should be tailor-made in a way to accommodate individuals from the following categories.

Those residing in rural areas and slums,  
Those without formal educational qualifications,  
Those without sufficient funds to meet the course expenses,  
Aged persons who are normally outside the scope of an academic programme and  
Candidates with sufficient educational qualifications irrespective of the field of study and having original ideas.

## ***2.2 Who Should Teach***

The programme facilitators should be able to provide the required support for inculcating the entrepreneurial intentions of aspirants. A person with only functional literacy should get the psychological support for articulating his or her powerful ideas. Prospective entrepreneurs may not have sufficient knowledge in various functional areas such as technology, legal procedures and management. The role profile of an entrepreneurial trainer should be wide enough to provide support in these vital areas in a way to materialize the raw idea of the prospective entrepreneur.

## ***2.3 What to Teach***

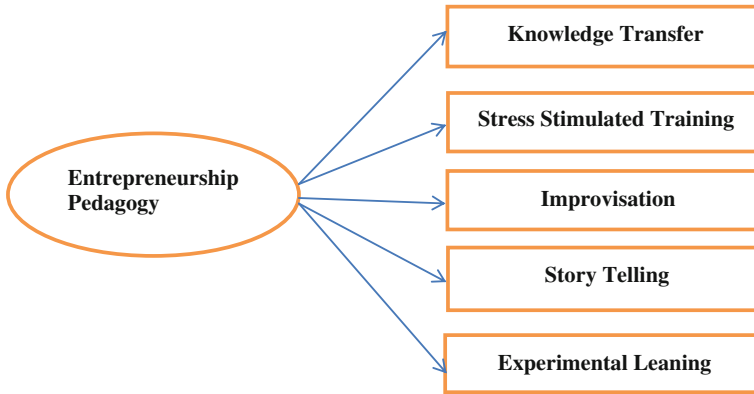
The content part of an entrepreneurial course should be tailor-made to meet the requirements of the prospective entrepreneurs. A uniform syllabus with

standardized content of a usual undergraduate and postgraduate programme may not serve the purpose of an entrepreneurial course. There should be a set of syllabuses for matching the varying requirements of the target group scattered in various social, cultural, economic and educational levels of the society. The programme content for the group with sufficient managerial background should be designed without any repetition of functional management areas. The group with only functional literacy may not have the ability to follow the technical aspects of entrepreneurship. Syllabus for such a group should be prepared in a dilated, transparent and understandable way.

## ***2.4 How to Teach—The Pedagogical Model***

Our education programmes are closed systems with rigid structures at various levels such as undergraduate, postgraduate and research programmes. Innovative idea generation can happen outside the ivory tower of a university as it happened in the cases of several successful iconic entrepreneurs. Entrepreneurship is about creating new opportunities and operating in an environment which is uncertain and unknown to us within the available frames (Neck and Patricia 2011). Traditional approaches may not serve the purpose of fully equipping the students to face the challenges of an uncertain situation.

The pedagogical components configured by Maritz and Brown (2013) resemble the teaching methods of other postgraduate courses especially in management education programmes. Fayolle and Gailly (2008) highlight that the objectives of entrepreneurship pedagogy help entrepreneurial aspirants to understand the various dimensions of entrepreneurship. Entrepreneurship education must address the need of inculcating entrepreneurial intentions in such a way to begin the forward journey with a willingness to bear the risk involved in starting an enterprise in an innovative way. For equipping the entrepreneurial aspirants for making innovations, the pedagogy should be designed in an innovative way. Lehto et al. (2011) explain “innovation pedagogy” in terms of the techniques of imparting knowledge with a view to foster new venture development. Kettunen et al. (2013) describe the pivotal dimensions of “innovation pedagogy” as “interactive dialogue” between individuals, institutions and society. Several researchers have stressed the need of tailor-made pedagogy for teaching entrepreneurship. A specifically crafted pedagogy focused on teaching the “art component” of entrepreneurship is yet to be evolved. We propose the pedagogy by blending five components, namely improvisation, stress-stimulated training, storytelling, experimental learning and knowledge transfer. All these methods should be blended for teaching entrepreneurship according to the requirements and characteristics of the group. The proposed model is illustrated in Fig. 1.



**Fig. 1** Entrepreneurship pedagogy

## 2.5 *Improvisation*

Day (2002) postulates “forum theatre” based on the theoretical foundations of Boal (1995, 2000). Within the domain of performing arts, a subsystem is further specified as improvisation theatre. Forum theatre is formulated to focus on specific problems and utilizing the power of theatre and drama as a medium for demonstrating the various dimensions of those problems with an objective to foster change (Meisiek 2004). Boal (1995) highlights the power of theatre as an inclusive technique by nullifying the gap between actors and audience and also to equip the viewers to practise the possible dimensions of the central issue and to adapt into his real-world problems. Improvisation is a modified version of Boal’s theatre. Improvisation is centred around spontaneity, mutual trust, collaboration, listening, creativity, storytelling, effective interaction and performing with presence (Koppet 2001). In improvisational performance, the actors and the audience are working with an objective of exploring the various alternatives of the core theme. Clark (2008) describes the theatrical dimension of real life and its applications in training.

Forum theatre can be configured as “entrepreneurial theatre” in which trainees can act as actors and directors by playing the role of constituent stakeholders involved in the conduct of a venture. Various dimensions of theatre can be used for inspiring and stimulating people to reframe their thinking and behaviour. The stimulating potential of theatre can be used in entrepreneurial training for stimulating and changing their thinking patterns. Andersen (2004) also highlights the use of drama to support classroom learning.

Improvisation can be used to train entrepreneurial aspirants irrespective of their educational qualifications and previous entrepreneurial experience. One of the basic differences between entrepreneurial theatre and traditional drama is its absence of mere audience. Participants and audience among the trainees need to play the role of navigating and making up of the drama without any rehearsal. The facilitator

(teacher) can provide a general theme to the trainees for a drama performance. Trainees can decide the actors and audience without any choice. Without much preparation, they need to start the performance and change the roles as per the spontaneous thinking of the actors. The audience also can suggest changes of specific roles which the actors need to incorporate without any objections. After various changes, the drama will proceed to its natural climax.

From this kind of performance, the participants can develop skills which cannot be learned through a traditional classroom environment. We propose that repeated performances will help the participants to crystallize their ideas into entrepreneurial intentions.

## **2.6 *Storytelling***

Several scholars have analysed the concept of dialogue as an innovation strategy with a focus on real-world experimentation-enabled learning (Boal 1995; Cunliffe 2002a, b; Melkas and Harmaakorpi 2012). Storytelling is an appropriate technique for analysing situations from the viewpoint of the teller (Gabriel 2000; Gabriel and Connell 2010; Abma 2007) and also for promoting dialogue-linked learning (Abma 2003; Cunliffe 2002a). Innovative researchers suggested the significance of multivoiced interactions for fostering innovation (Nilsen and Ellstrom 2012; Pässilä et al. 2013).

Dramaturgical storytelling technique (Pässilä et al. 2013) is a technique where individuals assemble together and share their ideas with the help of theatrical images (TI). Application of dramaturgical storytelling technique in entrepreneurship training will enable the trainees to communicate their views and ideas in an ingenious way without any inhibitions and roadblocks due to the traditional knowledge transfer approach. This approach can be configured in a learner-centred way as outlined in Fig. 2

Dramaturgical analysis of stories will dilute the otherwise complex real-world dilemmas into familiar simple situations. This will lead to the bypassing of problematic paths to venture creation by simplified methods understandable to the trainees from different backgrounds. Verbal descriptions and theoretical predicaments are beyond the normal reach of individuals without advanced level knowledge in the specific areas. Storytelling can be utilized for entrepreneurship training purpose for groups with low-level education to professionally qualified persons.

## **2.7 *Stress-Stimulated Training***

The saying “The strength of a ship needs to be tested not in the safety of a harbour, but in a turbulent sea”, is very much relevant to entrepreneurial training. An ideal entrepreneurship trainer should be able to equip the trainees to face the challenges of the real-world problems of entrepreneurs. Traditional training in a normal frame

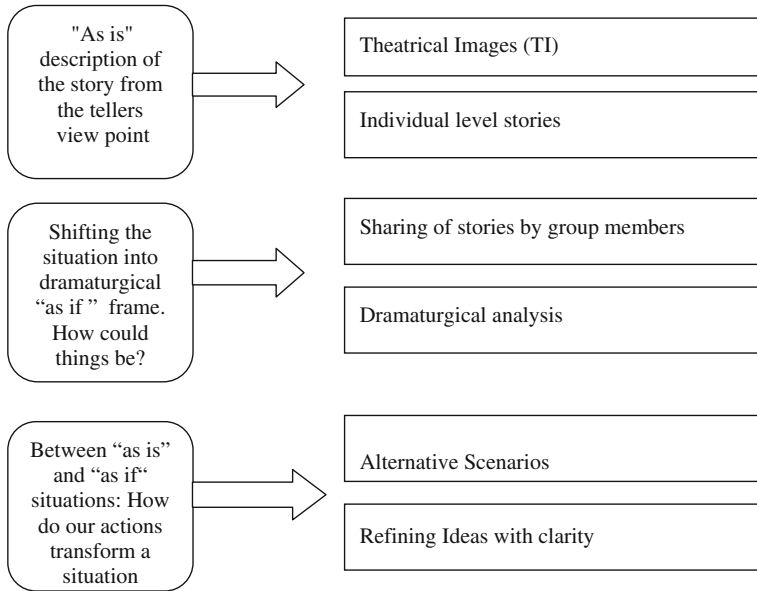


Fig. 2 Dramaturgical storytelling technique (Pässilä et al. 2013)

would not provide the competence to handle such problematic situations. The objective of stress-stimulated training should be to alleviate the fear of failure associated with all venture creations. While providing training by using various methodologies, stress should be induced in such a way without affecting the fundamental dimension of the methodology. In dramaturgical storytelling methodology, stress should not be induced in the initial levels, which may affect the free flow nature of the stories.

## 2.8 Experimental Learning

Kolb and Kolb (2006) describe the learning process-centred changes from the knowledge transfer method to experimental approach in the fields such as management education, medicine and psychology with a view to improving the outcomes. Empirical studies conducted by Cleave-Hogg and Morgan (2002) and McGlenn (2003) highlighted the instrumental influence of experiential learning in strengthening students’ meta-cognitive abilities, their competence to apply newly acquired skills and knowledge to real-world issues and the ability to become self-empowered learners (Kolb and Kolb 2006).

In order to equip the mindset of an entrepreneurial aspirant to wilfully act in a planned way to behave in a direction to start a new venture requires lot of courage and lack of fear. Fear of failure should be eliminated as a precursor of

decision-making to start an enterprise. The experimental learning dimension can be incorporated in entrepreneurship training pedagogy by providing initial-level incubation support to entrepreneurs as a learning platform with minimum investment, thereby eliminating the risk of huge losses in the case of real start-ups.

## ***2.9 Knowledge Transfer Approach***

Managing an enterprise in the present-day environment requires technical know-how, knowledge in the legal procedures and other procedural areas. This functional knowledge can be taught by using knowledge transfer approach in a refined way. The traditional approach may require prerequisite of fundamental knowledge. In usual undergraduate and postgraduate programmes, the participant objectives can be generalized as the requirements of employers. Programme content designers used to frame it in such a way to match the employer expectations. The objectives of entrepreneurship programmes should focus on the requirements to start and manage an enterprise. Dimensions which can be taught by using knowledge transfer approach can be included in the content in a dilated way. The teaching modules must be designed in an understandable way for the entrepreneurial aspirants. Contents must be limited to the extent within the requirements of entrepreneurs.

## **3 Conclusion**

The five dimensions of the pedagogy aim at revamping the entrepreneurial education with an objective of inculcating entrepreneurial intentions of prospective entrepreneurs. We expect that implementation of this pedagogy will equip the entrepreneurial trainees to face the real-world challenges during the process of entrepreneurial journey. Dramaturgical storytelling is appropriate for conveying newer ideas and real-world issues to individuals and groups from a plane which resembles reality. Storytelling can be used for teaching probable techniques for solving real-world dilemmas. Improvisation is an ideal method for teaching the art of converting raw ideas into plausible business models. Spontaneous nature of the drama will help the participants to explore various complex dimensions of a problem. Suggestions from actors and inside audience will help the trainees to analyse the central issue from all possible angles. Experimental learning-enabled incubation support is suitable for alleviating the fear of failure from the minds of entrepreneurial aspirants. Stress-stimulated training is essential for preparing the aspirant to operate in an always-stressful entrepreneurial world. Knowledge transfer approach is useful for teaching essential technical and procedural knowledge. These dimensions need to be blended as per the profile of the group and the content-wise differences. This theoretical model requires empirical validation from a real-world entrepreneurial framework.

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# Chapter 13

## Educating the New Generation

### Entrepreneurs: The Role of Alumni

### Entrepreneurs

Pradnya Chitrao and Pravin Kumar Bhojar

**Abstract** In the 21st century, employment is mostly created by new and small businesses. It is only recently that B-Schools are waking to the concept of moulding entrepreneurs. To be a successful entrepreneur, one needs to go beyond the classroom walls and get exposure to the practical aspects of any business. Government should streamline the formalities for budding entrepreneurs and support them as future sources of employment opportunities for the nation. Support from financial institutions needs to be extended on fair and equitable terms, without of course giving away any handouts. Business Schools must proactively establish incubation centres, so that student managers can shadow start-ups and thus learn the ropes of starting and running a business. This will help to develop and nurture the entrepreneurship culture through new businesses for meeting the growing requirements of the 21st century. The paper has focussed on a case study of a student manager who utilized the benefits of the incubation centre within the B-School he was studying, and in a span of one and a half year, attained adequate success to motivate him to opt out of placements and continue his entrepreneurial venture as a full-time occupation.

**Keywords** Apprenticeship · Government support · Incubation centres · Practical curriculum · Teachable skill

## 1 Introduction

Entrepreneurship is the buzzword of the 21st century especially in emerging economies. Whilst a majority of student managers passing out of B-Schools in India opt for a job, there is a slowly growing body of qualified student managers choosing

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to start their own business ventures. Even so, this percentage is far less than the percentage that opts for a salaried career. Yet, the Indian economy is growing at a healthy pace generally above 6% per annum, with ample scope for different kinds of business activities.

B-Schools so far teach people to work for entrepreneurs. They do not teach them to become entrepreneurs. For this certain measures need to be taken so that aspiring entrepreneurs consider investment in a B-School education profitable for realizing their dreams.

## 2 Literature Review

### 2.1 *Definition of Entrepreneurship*

Entrepreneurship has been studied right since the 17th Century as is seen from the works of Richard Cantillon (1755). Cantillon described entrepreneurship as pervasive, and he casted the entrepreneur with a pivotal role in the economy. More and more countries are becoming stable democracies that adopt free market policies. In such a scenario, the ability to create businesses has become essential for nations to compete globally. It has essentially been linked with economic equilibrium. One perspective views entrepreneurship as an entrepreneur driven process for the promotion of innovations for shaking complacent economic equilibria and getting resources redistributed in order to generate and accumulate wealth. Peter Drucker termed this process 'creative destruction'. The second perspective proposed by Kirzner (1979) considers entrepreneurship to be a process for the promotion, generation, and accumulation of economic wealth attained by nudging asymmetrical economies towards greater equilibrium. This perspective recognizes entrepreneurs as persons capable of recognizing and using market opportunities created by disruption in the equilibrium of economies. This implies that entrepreneurs are capable of making firms prosper in hostile environments by even changing the industry 'rules' (Aldrich and Martinez, 2003).

At the same time, entrepreneurs are viewed as not afraid of the risks involved in rebelling against normative structures whilst solving in an innovative way specific social and/or economic issues (Thornton 1999). This does not mean that they are viewed as reckless. In fact, they innovatively employ both internal and external situations for creating profitable economic resources both for themselves as well as their organization, and simultaneously create within their organization, social and political change platforms (Chiles et al. 2007). They do not take blind risks; instead, they develop refined strategies for identification and reduction of risks in potential market opportunities (Keh et al. 2002). Entrepreneurs are viewed as initiating change and also roping in resources for the same. If successful, they are applauded (Gross 2005). They are essentially storytellers who bring in social and economic change through entrepreneurial ventures by winning commitment from persons

capable of contributing valuable financial and social capital (Henry et al. 2005). They utilize opportunities for creating valuable social and economic environments.

Entrepreneurship is thus the creation and sustenance of economic and social value through the development and implementation of innovative strategies and solutions through identification of opportunities, some risk taking and mitigation, and resource allocation and mobilization (Jones-Evans et al. 2006).

## ***2.2 Entrepreneurship and 21st Century B-School Education***

For this reason, entrepreneurship is being valued in the 21st century especially in emerging economies. Today, more information is being generated about how entrepreneurship happens but little is known about what can and ought to be taught from that new knowledge. Educational institutions, government, society and corporate must all in the interests of the economy, promote entrepreneurship in their own manner. In fact, progressive B-Schools are incorporating a course on entrepreneurship in their curriculum. Last year five student managers from the IIMs declined placements and started their own businesses. Mr. R. Venkat of IIM Ahmedabad started an online firm called Focaloid that suggests clients' assignments photographers. CIIE gave him a seed fund of Rs. 5 lakhs. He raised Rs. 4 lakhs with the help of two other friends who gave up their regular jobs to join him. Mr. Gaurav Midha from IIM Lucknow started a Data Analytics firm called beyond numbers with zero financial investment. His partners accepted job offers during placements but he did not give up his dream. According to him, data analytics is growing in India at 20–25%. Mr. Niranjana K.M. of IIM Indore decided last year to manufacture and sell cheap sanitary napkins to rural women. He needed around Rs. 1 crore out of which Rs. 25 lakhs have been approved by Tamil Nadu Government. Mr. Ajusal Sugathan and Mr. Achin Agarwal of IIM, Bangalore started Hedge Quants that specializes in quantitative trading and investment strategies. They collaborated with Shivmangal Securities, a Kolkata brokerage firm, on a profit sharing basis.

The coming 20 years or so are bound to see major changes in the demand and supply of education especially in the field of management science. The 21st century is witness to so much of disruptive technologies leading to globalization, demographic shifts and deregulation. Management education has to accordingly change to prepare student managers to handle changes in primary markets, products and partnerships (Scarpetta et al. 2002). It must equip student managers with the knowledge and the tools to take initiatives and start and develop sustainable business ventures (Pittaway and Cope 2006). Entrepreneurship today is seen as the golden path of creating employment opportunities and attaining prosperity in both developed as well as developing nations (Kuratko 2005). The European commission in 2006 acknowledged that entrepreneurship results in economic growth; it is committed to the policy of creating an enterprising culture (Gibb 2005). This has created an awareness that education facilitates student entrepreneurship which in

turn leads to the creation of education programmes and initiatives that promote the same (Fayolle et al. 2006).

The Education and Training 2010 Work Programme views entrepreneurship as a key competency of lifelong learning. Anderson and Jack (2008) consider that enterprise owners and managers need entrepreneurial knowledge. Interestingly, formal education is not viewed as promoting entrepreneurship (European Commission 2007). It is therefore essential to incorporate entrepreneurship in the curriculum to promote it (Peterman and Kennedy, 2003).

## ***2.3 Entrepreneurship Education and Backward Integration***

The 21st century is witness to backward integration as a form of promoting entrepreneurship. Backward integration is a version of vertical integration that involves the purchase of suppliers. Companies will pursue backward integration when it will result in improved efficiency and cost savings. Backward integration allows companies to access an increasing number of production inputs and distribution resources. Backward integration models promote the setting up of a few innovative companies by student entrepreneurs that are reasonably successful initially and promise future potential. It also exposes student into real entrepreneurship in a competitive do-it to learn-it environment. It is emotionally much harder to restart after a failure because the risks seem clearer (Noel 2001). Also, in the real world, successful entrepreneurs are rarely willing to share their knowledge and learnings with others for fear of competition (Thurik et al. 2002).

### **2.3.1 B-Schools and Incubation Centres**

Business Schools also are setting up incubation centres in order to encourage student managers to become entrepreneurs (Storey 2003). Charlie Baecker, administrative director for the Don Beall Center for Innovation and Entrepreneurship at University of California—Irvine's Paul Merage School of Business compared an incubator to 'learning to ride a bike with training wheels'. In his opinion, a school incubator can connect aspiring entrepreneurs with experienced professionals who can advise them about creating new technology, marketing, funding and other kinds of sources. Incubators usually welcome local entrepreneurs as well as business students who are excited to launch a new venture. An incubator helps the entrepreneur become what experts call 'cash positive'. As Baecker puts it, incubators help you reach a stage where 'you're generating more cash than you're using'.

In India, almost every prestigious B-School today has an incubation centre for nurturing great ideas from their very source. A business incubator helps start-up companies grow by providing services such as management training or office space. Besides physical infrastructure and capital, these incubators also help nascent budding entrepreneurs network with relevant industry people as well as potential

investors. Incubators partner with a start-up for a predetermined small frame of time, i.e. around 2–3 years. Society for Innovation and Entrepreneurship (SINE), the business incubator at IIT-B offers fully equipped office space at nominal rates. Its presence on the IIT campus enables start-ups access laboratories and other technical facilities. SINE assists a start-up for 3 years, during which it offers a loan or equity of Rs. 20–25 lakhs. Thus, Urjas, a student start-up was helped by SINE in 2012; it provides renewable energy technology for the masses. Pradeep Podal, founder, Urjas, acknowledged that SINE mentored and provided emotional support as well as resources. IIM Ahmedabad set up with support from Govt. of India and Gujarat Government, the Centre for Innovation Incubation and Entrepreneurship; it operates on an autonomous not-for-profit entity basis. CIIE comprises of IIMA faculty, alumni and other individuals; it collaborates with like-minded organizations to promote entrepreneurship through incubation, ecosystem development and academic initiatives. Similarly, the incubator facility at ISB, set up in 2008 under the institute's Wadhvani Centre for Entrepreneurship Development, grooms and assists student entrepreneurs in business planning, and makes entrepreneurship a valid career option.

## ***2.4 Objectives***

The objective of the paper is (a) to put forth the view that it is not enough for B-Schools to just include a course on entrepreneurship but to open incubation centres for student managers to encourage them to start and develop their own business ventures. (b) It aims to show that through a model of backward integration, B-Schools should invite alumni who have become entrepreneurs as also other entrepreneurs to come and motivate student managers to become entrepreneurs and to guide and help them succeed. (c) It also expresses the view that experienced faculty with corporate connections and preferably entrepreneurial experience should also actively support these enthusiastic students in the interests of a growing and sustainable economy.

## **3 Research Methodology**

### ***3.1 Primary Sources***

The paper uses a case study of a student manager at Symbiosis Institute of Management Studies (SIMS) to show how besides incorporating entrepreneurship subject in the curriculum, B-Schools should start incubation centres within their premises to support student start-ups in terms of infrastructure and competent guidance from experienced faculty having strong connections with industry. The

case study is used to illustrate the need for management institutions to invite alumni who have become entrepreneurs as also other entrepreneurs for guest lectures to motivate student managers to start their business ventures. The case study is also an example of how the expertise and other help offered by these same persons promotes the entrepreneurial spirit amongst student managers and helps them strive to achieve their dreams through hard work and perseverance.

### **3.2 Secondary Sources**

The paper uses secondary data to support the view of the need for B-Schools and alumni and faculty to extend all possible help and guidance to budding entrepreneurs in all possible ways.

## **4 Promoting Entrepreneurship Through Classroom Sessions**

Entrepreneurship, on account of its variable, complex and contingent nature is a subject that is difficult to teach through just the lecture mode (Anderson and Jack 2008). Entrepreneurship education differs from country to country and institution to institution in terms of objectives, pedagogy, audience and format (Young, 1997). Further, issues of coherence, quality and purpose can make the programmes less effective (Hannon 2006). Effective entrepreneurship education should ideally create a good overall understanding of entrepreneurship; it should enable the acquisition of an entrepreneurial mind set, and it should teach a student manager, the art of starting and operating an enterprise effectively (Solomon et al. 2002).

At the same time, university or a B-School education plays a prominent role in a knowledge-based economy and is the foundation on which new industries and firms are created. It no longer plays the earlier secondary role of providing trained personnel and basic research. Teaching today has to expand from the lecture and discussion mode to the project mode in which participants discuss ideas and come up with a common goal with the faculty serving as guide. Universities today are realizing the need to develop technology transfer capabilities and extend their teaching from educating individuals to shaping enterprises through entrepreneurial education and incubation ( Skarzynski and Schaedler, 2010).

Business incubation is a business support process that speeds up the successful development of new companies by exposing entrepreneurs to a range of targeted resources and services. The incubator management develops these services and offers them both in the business incubator and through its network of contacts. A business incubator primarily aims to come up with financially viable and free-standing firms that will succeed. These incubator born enterprises can create jobs, commercialize new technologies and foster the growth of local and national economies.



A main feature of an incubator is providing management guidance, technical assistance and consulting that match the requirements of fledgling companies. They usually also provide client companies access to appropriate rental space and flexible leases, shared basic business services and equipment, technology support services and assistance in obtaining the financing necessary for company growth.

B-School incubation centres teach student managers to act as effective organizations. The aim of business entrepreneurship is to secure enhanced autonomy for the student entrepreneur who wishes to control one's own destiny and at the same time make money. In all economies of the world, including emerging economies like India, it is a means to promote economic growth. Consequently, entrepreneurship education has to be a combination of practical and academic skills (Hindle 2006).

## **5 SIMS' Promotion of Entrepreneurial Spirit Amongst Student Managers**

At SIMS, every effort is taken to promote the entrepreneurial spirit amongst student managers. The institute has set up an entrepreneurship cell. This cell from time to time organizes entrepreneurship awareness lectures by different entrepreneurs for the juniors. It comes up with a newsletter that focuses on different entrepreneurs and the issues faced in starting and running a business. It organizes events such as Market Beat in the very first semester wherein student managers are encouraged to set up their offerings for those two days and are allowed to keep the profits. The best business ideas are allowed to continue on campus for 18 months with a business agreement being drawn up between the student manager(s) and SIMS. After 18 months, these businesses are allowed to be auctioned to their juniors with a pre-decided base price as the starting point for the bidding. One very good example is Creativa which is a laundry business on campus started by student managers 2 years ago. The team invested Rs. 22,000/- in a washing machine and urged all student managers to give their clothes to them for washing. They were allowed to keep their clothes in laundry bags outside their hostel rooms which one of the business partners would collect every day at a specified time. This year in February, the same business was bought by three student managers of the batch of 2015–17 at an auctioned price of Rs. 70,000/-. One of the team members that bought this business is very happy with the learnings that this experience is yielding and also is hopeful of covering all the costs by the time it is time to auction it to their juniors. This is a very novel form of encouraging entrepreneurship and imparting all the practical learnings to students in a relatively safe environment of the B-School. It is a form of incubation for aspiring entrepreneurs.

The institute has also opened an incubation centre wherein an aspiring entrepreneur is offered a cabin with table, chairs, fan, lights, internet connection and networking contacts by the faculty-in-charge especially of lawyers, accountants,

company secretaries who give valuable inputs necessary for starting a business. Alumni who have turned entrepreneurs come for motivating student managers to become entrepreneurs with the assurance of support and guidance if needed. Experienced faculty having their own business enterprises and consultancy services give invaluable guidance to student managers desirous of starting and running their ventures.

### ***5.1 The Model of Backward Integration in Entrepreneurship as Proposed by SIMS Faculty***

Divekar and Kumar in their paper ‘Entrepreneurship on Campus: The Backward Integration Model for Investors’ (2012) promote the backward integration model in entrepreneurship wherein entrepreneurs can be trained in B-Schools by recognizing their entrepreneurial potential and then nurturing it. They found that this model is ideal for setting up successfully a few innovative businesses of student entrepreneurs and helping them become potentially full-fledged, sustainable ones.

Backward integration is basically a match made by an organization between its internal resources and skills and the opportunities and risks available in the external environment (Hebbar 2011). Normally, post student days, it is very difficult to restart entrepreneurial activity post a failure. But student managers are very enthusiastic and full of initiative. Further, entrepreneurs do not like to share their ideas and experiences with others. They will not talk about it till they have at least built and tested a prototype. Student managers have to make their own tools before building their final product. All this is easier to do on a B-School campus with guidance from experts and investors and involves less risk. Backward integration model of entrepreneurship is thus a sincere effort on the part of management institutes to prevent new ventures from failing, and to instil confidence in both investors as well as the student managers desirous of becoming entrepreneurs; it is a process wherein alumni entrepreneurs come back to their Alma Mater to encourage student managers to become entrepreneurs with assurance of support from their side. They see it as an approach adopted by investors to increase their control on the entrepreneurs being trained in the B-Schools by recognizing their entrepreneurial potential and then nurturing it. Divekar and Kumar (2012) found that the regular interaction involved with the budding entrepreneurs and with the institute in the backward integration model of entrepreneurship helped overcome the fear and the lack of knowledge of procedures and of tackling various issues whilst starting a new venture.

## **5.2 *Dr. Sunil Shekhawat's Identify Oral Care Pvt. Ltd—A Case Study of Backward Integration***

A case in point of the backward integration model in entrepreneurship is Dr. Sunil Shekhawat's Identify Oral Care Pvt. Ltd. A student of the full-time 2013–2015 batch of SIMS, Pune, his new venture provides complete oral care solutions to corporate and institutional clients. Whilst the company was registered on 28th January 2014, he started working on the enterprise concept from July 2013 itself as a junior student manager.

Dr. Shekhawat had joined SIMS with the idea of getting into a reputed pharmaceutical company (namely Cipla) as a dental surgeon. On learning of the entrepreneurship sessions at SIMS, he started attending them. He then started having aspiration of becoming an entrepreneur like his father. His father post his early retirement from the defence forces, started a pathology laboratory. By now his father had five laboratories in Anwar, and his monthly income had risen from Rs. 2 to 4 thousand to around Rs. 4 to 5 lakhs. With his father as a role model, he also started attending IIT, Mumbai incubation sessions on weekends. He was also relieved to learn that SIMS has its own incubation centre to encourage young people wanting to become entrepreneurs. Ninety per cent of the incubation centres in India support IT-based businesses. In SIMS' incubation centre, all kinds of businesses get support.

Dr. Shekhawat's first hunt was for a partner who would make effective presentations, and handle marketing. He roped in his batchmate, Mr. Abhishek Samant, by offering equity shares in his company. Initially, he approached companies directly and found it impossible to get corporate to listen to persons like himself who had a start-up with no credibility. At the same time, he continued to attend sessions of alumni/persons who had turned entrepreneurs organized by the Entrepreneurship Cell of SIMS. People such as Mr. Manish of Incu Capital, Mr. Rajeev Kher of Mobile Toilets, Mr. Abhay Kumar, Mr. Surjit, and Dr. Ganesh Nikambh of Redwise came and gave talks and urged student managers to start their own ventures.

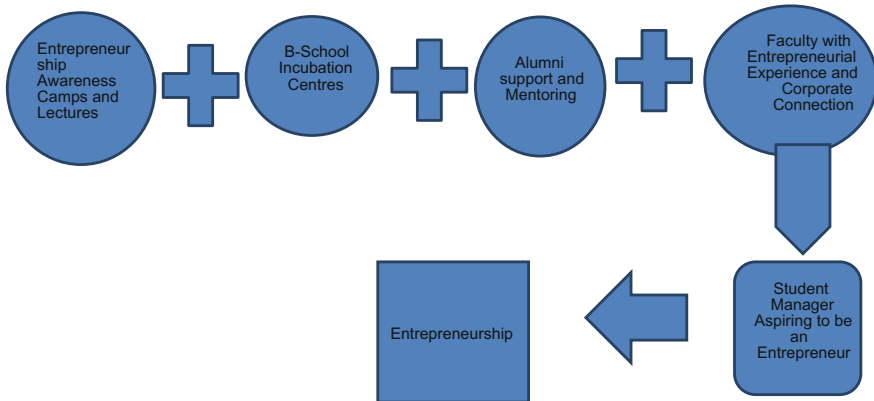
At the same time, Dr. Shekhawat requested and readily received expert guidance from consultant faculty at SIMS namely Prof. Sunil Kumar. Mentoring is indeed very crucial for starting a business and for growing it. Mr. Abhay Kumar and his business partners, all alumni of SIMS, actively encouraged and supported him by way of business advice, and even allowed him to give their business address for business correspondence and use a portion of their business premises for client meetings.

So far, Dr. Shekhawat has pumped in self investment of around eight to nine lakhs of rupees and an angel investment of Rs. 4 lakhs from a distant cousin (Rs. 1 lakh every month from August 2014). He is also supported by Mr. Sanjay Joshi, another SIMS alumnus and an entrepreneur having own firm of IT solutions at

Baner, Pune. R. Joshi has made available two cubicles of his office premises for Dr. Shekhawat’s business. Since last year, i.e. 2015, the year since he passed out from SIMS, he takes some student managers as summer interns and teaches them hands on the various nuances of talking to different stakeholders in the business including prospective clients.

The researchers thus, on the basis of Dr. Shekhawat’s case, propose a model of entrepreneurial education for B-Schools to implement in order to encourage more and more student managers to view entrepreneurship as a viable and attractive option. They propose that B-Schools should first of all set up an entrepreneurship cell under the mentorship of a faculty who is trained in entrepreneurship. Dr. Pravin Kumar, the faculty-in-charge of the entrepreneurship cell at SIMS has undergone training in the same from IIM, Bangalore. The cell should hold entrepreneurship awareness camps for the student managers right in their first year at the institute wherein alumni entrepreneurs and other seasoned professionals from different walks of life come and give inputs.

On the basis of the above mentioned case study and practices followed at SIMS, the researchers have come up with the following model of entrepreneurial education for encouraging entrepreneurial activity amongst student managers.



As per the above model, the researchers opine that B-Schools can best mould entrepreneurs by setting up entrepreneurship cells headed by trained faculty, by organizing entrepreneurship awareness camps and lectures, by setting up incubation centres, by having guidance and mentoring from experienced faculty with contacts in industry and by inviting alumni who have turned entrepreneurs to come and deliver talks and guide and support student managers. This in turn will lead to entrepreneurial eco-systems beneficial to the community.

## 6 Conclusion

The case study of Dr. Shekhawat is an example of the outside the classroom techniques adopted by a premier B-School in Pune, Maharashtra (India) to promote sustainable enterprises. The case study proves that the model of backward integration of entrepreneurship wherein alumni and entrepreneurs come and motivate, mentor, and support aspiring entrepreneurs amongst student managers combined with the incubation centre facilities of the B-School, and the guidance of the experienced faculty is very successful in reducing chances of the failure of the new venture and of fostering confidence in both student managers as well as investors. It proves that entrepreneurship education courses have to go beyond the walls of the classroom to promote the entrepreneurial spirit. To develop entrepreneurs, B-Schools today play an important role in instilling in their student managers the capability of navigating their business ventures through increasing intense competition and uncertainty.

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# Chapter 14

## Promoting Entrepreneurship in Higher Educational Institutions: The Role of Entrepreneurial Methodologies

Kiran Srivastava and Princy Thomas

**Abstract** Entrepreneurship education is one of the most influential forces in the growth and development of an economy. It diminishes the twin issues of unemployment and poverty through entrepreneurship creation. The paradigm shift of student focus on job-oriented programme to job-creating programmes such as Management in Entrepreneurship, Diploma in Entrepreneurship and other training programmes raised the scope of entrepreneurship. Based on a comprehensive review of the relevant literature, this paper suggests that the pedagogical tools employed in entrepreneurship education such as role modelling, hands-on experience, incubation and mentoring support can be effectively used for developing entrepreneurial intentions among the students in higher educational institutions. The paper discusses few propositions developed based on the literature review and proposes a model which can be adopted by higher educational institutions for increasing entrepreneurial intention and thereby entrepreneurship.

**Keywords** Entrepreneurship education • Role modelling • Hands-on experience • Incubation and mentoring support

### 1 Introduction

Entrepreneurship education has emerged as one of the most economic forces of development by diminishing the twin issues of unemployment and poverty through entrepreneurship creation. Entrepreneurship education not only contributes to economic development, but also solve social issues (Lekoko et al. 2012) and community support infrastructure (Nian et al. 2014). Entrepreneurship education

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enhances the capability of students for starting their own ventures by creating a culture of innovation, proactiveness and risk-taking tolerance (Miller 1983). These types of entrepreneurial-focused education create an entrepreneurial culture within students (Kuratko 2005). The entrepreneurship culture contributes to the innovation of the market, job creation, sustainable employment levels with well-being of the society (Shane and Venkataraman 2000) and a tool for economic growth (Arthur et al. 2012).

The causes and consequences within the level of entrepreneurship education are a matter of debate among researchers, scientists, policy makers and governments. There has never been a definite answer to the question of whether entrepreneurship can be taught (Harrison 2014). Few researchers argue that entrepreneurs are made but not born (Nian et al. 2014), and suggest that the entrepreneurship education can be learned like any other discipline (Drucker 1985). According to Kuratko (2004), it is neither a magic nor connected with genes. The importance of entrepreneurship education is in fostering the right entrepreneurship culture with requisite training is gaining ground (Drucker 1985; Trivedi 2010). Like any other discipline, some of the entrepreneurship knowledge and skills such as practice behaviour of entrepreneurship culture (Drucker 1985) can be taught (Klein and Bullock 2006) and some cannot be (Nian et al. 2014). Researchers have the opinion that custom-designed entrepreneurship pedagogy (Jossberger et al. 2010; Jarvi 2012) can develop entrepreneurial competencies among students. The role of entrepreneur in creating entrepreneurship is clear from the theoretical form, as  $E = f(e)$  states that entrepreneurship ( $E$ ) is a function of the entrepreneur ( $e$ ) (Kuratko and Hodgetts 2004).

In today's competitive world, entrepreneurship education has been assessed from different viewpoint such as what is to be educated, why it is to be educated, how it is to be educated and how proficiently it works. The present curriculum does not highlights the challenges emerged in out of expeditious issues of growing technology and the challenges involved in running an enterprise (Rao 1997). There is no predominantly obtained pedagogical model to evaluate the entrepreneurship education (Solomon et al. 1998). Though the rapid interest is increasing in the domain of entrepreneurship education, there is very little research has examined the pedagogical tools employed used for developing entrepreneurial intention among students especially in higher educational institutions (Wang and Wong 2004; Menzies and Tatroff 2006).

The present article works towards the nature of entrepreneurship education which assimilates the reviews based on qualitative evidence to assess the pervasive status of proclaiming entrepreneurship education in higher educational institutions. The article also proposed the entrepreneurial theoretical framework for an implicit higher education system. The proliferation of paper introduces an outline for promoting entrepreneurship culture within the educational institutions and describes the role of various pedagogies used in education system such as role modelling, hands-on experience, incubation and mentoring support in creating entrepreneurial intention among students.



## 2 Review of Literature

Entrepreneurship education includes the ability to recognize the opportunities in one's own life; the ability to create the new idea for managing a new venture; and the ability to think in creative and critical manner (Raposo and Do Paço 2011). Entrepreneurship education develops entrepreneurial skills, behaviour, self-efficacy and identity (Henderson and Robertson 2000) which points out the cognitive (increasing knowledge), affective (feelings) and conative (doing) behaviour of individuals (Sagie and Elizur 1999). It outlines the proficiency of acknowledging business opportunity, classifying and starting a new business venture (Eisenhardt et al. 2000). Entrepreneurship education is a lifelong learning process which consists of five stages such as basics, competency awareness, creative applications, start-up and growth (The Consortium for Entrepreneurship Education 2004; Isaacs et al. 2007). It provides opportunity for experiential learning which gives them a real-world exposure (Herrmann et al. 2008). It enables the learner to develop the entrepreneurial skills, abilities and necessary qualities to sustain in the world of business. These skills and mental awareness help wannabee entrepreneurs to begin their ventures and entrepreneurs to expand their growth-oriented ventures (Alberti et al. 2004). In short, it gives the basic guidance to run a business in an effective manner.

Smith and Petersen (2006) define entrepreneurship education sector creates entrepreneurs as innovators who may lead to the transformation of the public education system (Omer and Yemini 2016). The field of entrepreneurship education has focused extensively on research with rapid growth in building the capacity of creating new jobs and building the potential of entrepreneurs (Hill et al. 2003; Raichaudhuri 2005; Kourilsky 1995; Kuratko 2005; Venkatachalam and Waqif 2005). Entrepreneurship education has the capacity to influence an individual to take up a decision of becoming an entrepreneur (Volery and Mueller 2006) and to increase their interest of selecting entrepreneurship as a feasible career option (Gorman et al. 1997). Entrepreneurship education has been acknowledged as a determinant which can affect the career decision of students (Kolvereid and Moen 1997; Peterman and Kennedy 2003) and equips them to understand the themes of leadership, innovation and change (Man 2010).

An entrepreneurship education prepares the students with entrepreneurship mindset by developing entrepreneurship attitudes (Harris and Gibson 2008; Harris et al. 2015; Canziani et al. 2015), skills and behaviours, and builds entrepreneurship capacities for starting their own business (Nian et al. 2014).

It educates the students about business ownership and refines the outcomes of their performance as an option of employment (Stem et al. 1994 as cited in Ahmad 2013). It also provides the information about the students' career option to find out which is the more suitable career for them (Von Graevenitz et al. 2010). Entrepreneurship education generates significant outcomes as suggested by most of the practitioners, policy makers and researchers (Charney and Libecap 2003; Harison and Leitch 2008; Martinez et al. 2010; Muller and Diensberg 2011; OECD 2009).

### 3 Higher Education and Entrepreneurship

Higher educational institutions play a major role in instilling learners with entrepreneurial skills and knowledge to equip them for shaping their career venture (Nurmi and Paasio 2007). Van Burg et al. (2008) explained about five principles which can be used by higher educational institutions to promote entrepreneurship. The first principle is to create awareness about entrepreneurship opportunities, stimulate the development of entrepreneurial ideas and subsequently screen entrepreneurs and ideas by programs targeted at students and academic staff. The second principle is to support start-up teams in composing and learning the right mix of venturing skills and knowledge by providing access to advice, coaching and training. The third principle is to help starters in obtaining access to resources and developing their social capital by creating a collaborative network organization of investors, managers and advisors, and the fourth principle is to set clear and supportive rules and procedures that regulate the institutional spin-off process, enhance fair treatment of involved parties and separate spin-off processes from academic research and teaching. The fifth principle is to develop a culture that reinforces academic entrepreneurship by creating norms and exemplars that motivate entrepreneurial behaviour.

### 4 The Importance of Pedagogy in Promoting Entrepreneurship Education

Pedagogy is one of the important factors leading to the effectiveness of education. Research shows that pedagogy plays a major role in entrepreneurship education. An effective pedagogy in entrepreneurship education can create the ingenious mindset to provide a novel solution under unstructured state of risk and ambiguity (Sexton and Upton 1987). It develops the skills within the students to generate the new venture. It evolves the new ways to solve the problems by innovative and creative thinking, tools, tactics, scenarios, strategy to maintain the time in accomplishing the plans. It expands the choices in career of entrepreneurship by introducing the multiple circumstances and venues to apply the entrepreneurial education for successful, satisfying and interesting careers (Soloman 2007; Krueger et al. 2000). It also helps in developing the entrepreneurial intention among students and makes them capable to manage different problems from the entrepreneurial environment (Ronstadt 1990).

The pedagogy of entrepreneurial education is also changing because of the broadening market interest. The pedagogical practices followed in institutions includes experiential learning (Beard and Wilson 2002), active learning (Meyers and Jones 1993), simulations and cases (Carrier 2007), student business start-up

(Nabi et al. 2006), experimental learning (Hills 1988; Truell et al. 1998), strategy formation and implementation in practicing entrepreneurs (Klatt 1988; Solomon et al. 1994); developing business plans (Hills 1988; Vesper and McMullan 1988; Gartner and Vesper 1994; Gorman et al. 1997); entrepreneurs behavioural simulations (Stumpf et al. 1991); computer simulations (Brawer 1997), Guest Speakers (Neck and Greene 2011), hands-on project-based activities (Minniti and Bygrave 2001; Canziani et al. 2015) consultation with entrepreneurs (Solomon et al. 2002) and structured exercise (Alberti et al. 2004). These pedagogical innovations give chance to the students to experience the multiple simulated new venture decision-making with realistic experiences and also provide students the real work experience of entrepreneurship (Gorman et al. 1997; Vesper and McMullan 1988). Interaction with potential resource people such as accountants, lawyers, consultants and entrepreneurs can enhance the knowledge of students for a better understanding of the entrepreneurial ecosystem. The feedback by these experts during their interaction helps in complex decision-making (Clouse 1990; Brewer et al. 1993). According to Block and Stumpf (1992) these interactions help students to get awareness about various methods to survive in the business.

Researchers also highlighted the importance of various games in pedagogical practices. Usage of games helps to improve personal innovation, cognition involvement and self-esteem cognition with competitive spirit. Apart from this, playing games gives a lot of fun as well as knowledge which supplement traditional teaching techniques (Cohen and Rhenman 1961; Schreiber 1958; Lope and Baghero 2010). It develops interpersonal skills and creativity and promotes the active learning within the students (Hofstede and Pedersen 1999; Philpot and Peterson 1998; Ruben 1999).

## **5 Factors Leading to Entrepreneurship Intention in Higher Educational Institutions**

### ***5.1 Role Models and Entrepreneurial Intention***

Entrepreneurial education can provide access to role models which lead entrepreneurship more attractive (Dyre 1994). Role model is one of the major components to explain entrepreneurial intention (Scherer et al. 1989). The perceived performance of role models and the presence of role models have positive effects on entrepreneurial intention and entrepreneurial career expectancy (Scherer et al. 1989). The study conducted by Kruger (1993) highlights about the importance of “positiveness” of role model experience and perceived desirability of founding a firm.

Role models draw the attention of learners on the condition of helpful business-related information, guidance as well as moral support. The context of role models is vital in its circumstances by giving an instruction for socialization (Postigo et al. 2006; Rajkonwar 2006). The good illustration about successful entrepreneur gives strength to the learners with whom they can associate with which inspires them to become a successful business person (Bygrave 2004; Caputo and Dolinsky 1998). The role models have a positive impact on students towards propensity of entrepreneurial culture and entrepreneurial intention (Peterman and Kennedy 2003; Wong et al. 2005).

Role models have the profound impact on choosing the career as an entrepreneur (Krumboltz et al. 1976). It also strengthens the wish and self-efficacy within the students to become an entrepreneur (Van Auken et al. 2006). Therefore, role models may positively inspire the students with the high degree of resemblance which enhances the entrepreneurial intentions, and it leads to entrepreneurial activity (Krueger et al. 2000). Role models also serve as a source of learning and inspiration, based on their experience and knowledge as an entrepreneur with the human capital of starting a business and making it successful (Gimeno et al. 1997; Hamilton 2000; Parker and Van Praag 2006). The interaction with role model helps to build the capacity for solving the problems with self-confidence and creates the awareness of the opportunities about the start-up process (Davidsson and Honig 2003). These interaction encourages and prepares the students to construct an effective enterprise (Boyle 2007; Hytti and O’Gorman 2004; Hannon 2005). Therefore, entrepreneurial educational institutions should focus more on role model interactions to enhance the entrepreneurial knowledge and confidence of the students (Bligh 1998).

With remark of the above analysis, the following proposition is evolved:

**Proposition 1** Exposure to entrepreneurial role model influences the students’ desirability of entrepreneurship.

## ***5.2 Hands-on Experience***

The learning process of entrepreneurial education should not only be enclosed with classroom discussion, but also be refined and developed with the practice which empowers learners with hands-on experience by seeing, touching and feeling with reference to the business world (Dilts and Fowler 1999; McIntyre and Roche 1999; Cooper et al. 2004). This enables students with entrepreneurial intention and enhances their learning experience by imparting a good mechanism to the real business environment (Dilts and Fowler 1999). The most important objective of the hands-on experience is to provide academic as well as part-time field experience which exposes the perspective of work practices in practical nature within the industry that leads students to become self-employed (Gault et al. 2000; Dilts and

Fowler 1999). The proposed action integrates the theoretical knowledge and practical knowledge to enhance the learners' working skills in actual career world (Dodge and McKeough 2003).

Business plan competitions provide students an opportunity to get exposed to the real content required for starting a venture. It arouses the thought process of students about various perspectives of business, and they will try to answer many questions which they were not aware of. Entrepreneurship education gives exposure for the students to create concrete business plans (Ronstadt 1987).

Students get hands-on experience through experiential learning. Experiential learning is a methodology used by institutions where students get direct experience which helps them to "fully learn new skills and knowledge" (Stough and Haynes 2007). The various experiential learning opportunities (George Mason University 2011; Wilson and Beard 2003; Northern Illinois University OTC 2011) identified in higher educational institutions are voluntary experiences, study abroad experiences, student teaching experiences/presentations, service learning experiences, practicum experiences such as working in industry related to their fields, internship experiences, field work experiences, fellowship experiences, cooperative education experiences, clinical experiences and apprentices experiences.

Experiential learning helps students to learn through action, experience, discovery and exploration. It gives the opportunity to the students to increase their self-awareness, to know weaknesses and abilities (Fuchs et al. 2008; Harris and Gibson 2008; Matlay 2006), to develop their skills (Corbett 2005) and recognizing the opportunity which strengthen the intention and desire to become an entrepreneur (Fiet 2000; Peterman and Kennedy 2003). Entrepreneurship internships and business ventures on campus enhance the knowledge and skills in entrepreneurship.

Entrepreneurial education which provides hands-on experience helps the students to practice the path of transition which they have to perform in an organization (Burton et al. 2002; Dobrev and Barnett 2005). It provides the opportunity to experience the entrepreneurial behaviour with micro and macro element (Audia and Rider 2006; Sorensen 2007).

Hands-on experience in entrepreneurship education gives the opportunity for the students to have real working experience which helps them to create a new venture by their own (Neill and Mulholland 2003; Dilts and Fowler 1999; Hildebeitel et al. 2000). Research shows that those students who have undergone entrepreneurial internship has high degree of job satisfaction level than those who have not. (Hildebeitel et al. 2000). It provides the opportunity to the learners to have an exposure of business environment which enables them with a positive readiness of higher level of extrinsic and intrinsic rewards satisfactions (Gault et al. 2000).

Hands-on experience prepares the students to have an insight about their entrepreneurship. In other words, many researchers have highlighted the importance of having hands-on experience for the students, as a compulsory component for the educational structure to become more entrepreneurially inclined (Hildebeitel et al. 2000; Raymond et al. 1993). Hence, we propose

**Proposition 2** Entrepreneurial hands-on experience will influence the students' desirability of entrepreneurship.

### ***5.3 Incubation and Mentoring Support***

The incubator start-ups play a key role in the process of creating a new firm by giving assistance to the entrepreneurs about the resources and services (Tornatzky et al. 1995). Business incubation is a process aimed at supporting the development and scaling of growth-oriented, early stage enterprises (Khalil and Olafsen 2010). Business incubators constitute an environment, especially designed to hatch enterprises (Aerts et al. 2007). They provide a suitable environment for start-up companies to grow and become self-sustainable through proper mentoring and guidance. Business incubators guide start-ups in their growth process and promote innovation and entrepreneurship (Aerts et al. 2007). Grimaldi and Grandi (2005) explained four types of incubators: Business Innovation Centres (BICs), University Business Incubators (UBIs), Independent Private Incubators (IPIs), Corporate Private Incubators (CPIs). Due to the advancement of IT/ITES companies technology business incubators are also quite common everywhere.

The services provided by the business incubators vary based on the type of firms. For example, New Technology-Based Firms, business incubators provide business and technology assistance. Such assistance enables successful incubation of affiliated ventures through business- and technical-related assistance (Hansen et al. 2000; Vedovello 1997; Hackett and Dilts 2004). Business assistance includes planning, personnel recruiting, marketing, management, accounting, general legal expertise, accessing financial capital, accessing business contacts and tax assistance (Smilor and Gill 1986; Hansen et al. 2000; Mian 1996), and technical assistance includes access to university research activity and technologies, laboratory and workshop space and facilities (Mian 1996; Bakouros et al. 2002), industry contacts (Hansen et al. 2000), technology transfer processes, research and technology supply pipelines, intellectual property protection (Hannon 2005) and technological know-how skills (Scillitoe and Chakrabarti 2005).

Business Incubators support students to start their own ventures by providing the necessary inputs. There are many students with entrepreneurial aspirations and potential, but could not proceed due to various reasons such as lack of motivation, unawareness of various process, procedures, lack of mentoring and funding support. Higher education institutions can provide the necessary backup support through proper incubation services to these students to fulfil their dreams. For example, Capillary Technologies is the brain child of three students from Indian Institute of Technology (IIT) Khargpur. These students wanted to start their own venture after their short-term job. The idea was supported by the institution's incubation centre, and they got guidance as well as a funding support for starting the business. The students returned the investment to the institution after they

become successful entrepreneurs. These types of motivation and funding support can promote entrepreneurship in higher educational institutions.

Aerts et al. (2007) in his article mentioned about the first incubator which was established in 1959 in Batavia, New York in the United States, but the concept of entrepreneurship incubator started during 1980s (Albert et al. 2001), and initially, it was confined to support incubatee by providing infrastructure support and guidance from experts. Later the scope increased to create some forum where students, entrepreneurs, researchers and other experts from different disciplines share their views and contribute to enterprise value creation. Thus, business incubators act as a support environment by providing the shared space, conference rooms, telephone services and other infrastructure facilitates at an affordable price and support venture financing either by investing in the ventures themselves or by arranging a platform to get connected with investors (Bollinger et al. 1983). It also provides other support services such as professional business support and internal and external network provision (Bergek and Norrman 2008) for start-up and fledgling companies (Peters et al. 2004). Business incubators help the entrepreneur to obtain legitimacy and enhance the incubatee visibility and credibility. Incubators support incubatee in their journey of entrepreneurship with the guidance and support of entrepreneurial scientists, researchers, independent entrepreneurs and work collaboratively to make the venture successful (Gielen et al. 2013). An incubator provides guidance in setting up goals, provide support for marketing, management, structure design and help to get funding support. (Aaboen 2009; Autio and Klofsten 1998). It trains the entrepreneurial creative spirit within the students that empowers the ability of self-reliance activity (Goddard 2005). Thus, incubator start-ups provide a space for interacting with entrepreneurs, role models, mentors, lawyers, chartered accountants and other experts in the field of business to support the incubatee. These centres also link public and private hybrid actors as well as investors to assist early stage firms (Barrow 2001; Etzkowitz 2002).

The important feature of incubators in entrepreneurial education is to create jobs through self-employment, transferring the technology and imparting the entrepreneurial intention with innovations (Allen and Levine 1986; Mian 1997; Thierstein and Wilhelm 2001; Roper 1999; Al-Mubarak and Busler 2010). The concept of innovation is *more than doing new things to doing things in a new fashion*.

Mentoring is one of the important concepts in an incubator service. Incubators provide necessary mentoring and guidance to the incubatee. The mentors will be experienced people (McManus and Russell 1997) who can focus on the growth and development of the individual rather than just performance (Knouse 2001; Wilson 1998). For that, incubators/mentors act as leaders, models, coaches, teachers, advisors, counsellors or even as “buddies” (Kent et al. 2003, p. 442). The success of an incubator depends on the performance of its tenants/Incubatees. The mentorship and support activities help to reduce the tenant failure rate.

Incubatees can utilize two kinds of networks: internal and external networks. Internal network happens between different incubatees from the same centre and external networking happens through interaction between different incubatees in

different forums created by the incubators. Incubators provide their services either through one-to-one relationship (Stokes 2001; Tabbron et al. 1997) or networked business incubator support (Bøllingtoft and Ulhøi 2005).

Perren (2003) explained about the concept e-mentoring, a non-face-to-face interaction (Wood 1999) or online mentoring (O’Neil and Gomez 1996), where incubatee gets support through online interaction or through telephonic services. Perren (2003) in his article mentioned various research on e-mentoring which includes “computer-mediated mentoring (Cascio and Gasker 2001), tele-mentoring (Doyle 1995; Stokes 2001; Woodd 1999), e-mail mentoring (Woodd 1999), Internet mentoring (Sullivan 2000), online mentoring (Ensher et al. 2000) and virtual mentoring (Knouse 2001).

Now a days most of the universities have their own Incuabtion centres. The potential advantage of a university-based incubation centre is that, it is a hub where students from various disciplines, faculty, industry-exposed academicians and industry people can collaborate and work together for pormoting entrepreneurship and related opportunities. Faculty members with these industry exposures can enhance the skills of students through their incubation facility available (Lackeus and Middleton 2015). Bergek and Norrman (2008) identified three best practice incubator model components such as selection, business support and mediation for improving the incubator performance.

The organizational pillar of incubation in entrepreneurial education shapes different projects and tools, that imparts the added value and support to business services, subsidized space spin-offs and start-ups with consultation, straightforward funding, access to university facilities, networking opportunities, expert support, assistance of researchers, and other services to assist entrepreneurship such as academic–industry cooperation (Minguillo and Thelwall 2013). It provides an opportunity to the ventures which originates from the scientific research and knowledge-based circumstances to become excel in their performance through mentoring and funding support. In higher educational institutions, incubation services can be provided by setting up their own incubation facilitates or can collaborate with other business incubators to provide the best to their students. Therefore, we propose

**Proposition 3** Exposure to incubation and mentoring support may likely to increase the *students’* desirability of entrepreneurship.

## 6 Theoretical Framework in Entrepreneurial Education in Higher Education

The preference for entrepreneurship education has increased in recent times (Honig 2004; Rasmussen and Sorheim 2006) and higher educational institutions started offering different courses on entrepreneurship. Even though, the programme differs across institutions and countries. (Fayolle 2007; Fayolle and Klandt 2006; Fayolle

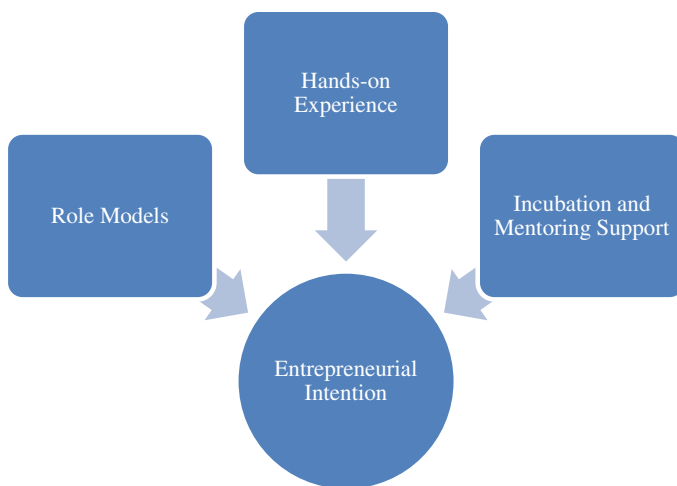


2008; Kyro 2008; Kyro and Carrier 2005; OECD 2009) the basic purpose of the course is to develop entrepreneurial skills and abilities among students. Majority of the colleges and universities offer courses based on theoretical assumptions. It has a long way to go in terms of earning the status of a preferred course with entrepreneurship research (Honig 2004; Rasmussen and Sorheim 2006).

The entrepreneurial education framework in higher education is in myopic condition which is far from being satisfactory level (Basu 2014; Dutta 2012). The objective of entrepreneurial education should always have a long-term focus instead of short term. An effective entrepreneurial ecosystem seems to be the solution to deal with the obstacles of teaching or developing entrepreneurial intention in the realm of higher education which is shown in the theoretical framework (Fig. 1) as a working structure.

The entrepreneurial education can push the overall knowledge abstraction based on promoting entrepreneurial culture through curriculum and content, role models, hands-on experience, incubation and mentoring support. Thus, the above framework shows that the initiation of entrepreneurial education has the potential to drive the development and promotion of an effective ecosystem particularly in higher education which fosters entrepreneurial culture and entrepreneurial intention within students.

For promoting, entrepreneurship education institutes offer “entrepreneurship cells” or “E- cells” (Basu 2014; Mutsuddi 2012) for the students of technical and management education. Moreover, entrepreneurial education is the amalgamation of learner’s development in skills, attitude and knowledge to create new ventures (EU 2006; Heder et al. 2011) and to sustain in the business world.



**Fig. 1** Proposed conceptual framework for an effective pedagogical practice on entrepreneurial intention for an ecosystem in emerging economies

## 7 Conclusion

The growing reliance on course effectiveness of entrepreneurship education is in paramount of higher education system. The entrepreneurship intention is substantial with the creation of a favourable ecosystem of service and resource providers. The government as well as private mentors and service providers are trying to accelerate the trends of entrepreneurship education for the future needs.

The paper suggests few measures which can increase the entrepreneurship intention of students in higher educational institutions. The current study focused on the theoretical framework of entrepreneurship education which promotes entrepreneurship culture and *entrepreneurship* intention with the help of role models accompanied with hands-on experience and incubation support. The author concedes that the finding of the present study is limited to the propositions based on review of literature. Further empirical research is essential to investigate whether the findings are researchable to generalize the propositions for higher education institutions.

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# Chapter 15

## The Configuration Approach to Entrepreneurship Education: The Case of an Entrepreneurship Course in a Management Program

Jyoti Dewan and A.K. Singh

**Abstract** Following the configuration approach (involving the individual personality orientation, course content, education process, and the environment), an entrepreneurship course was designed and implemented for management students in collaboration with an international NGO, where the focus was on innovative pedagogies such as “my story” sessions, case studies, site visits to enterprises, campus ventures, action-learning projects, ideation laboratories, and business simulation. The post-program assessment showed that the students were good at acquiring knowledge but required hand-holding for the creation of ventures.

**Keywords** Action-based curriculum · Competency clusters · Competency-based education model · Student professional competency indicator (SPCI)

### 1 Introduction

This chapter aims to investigate the factors which influence entrepreneurial thinking and attitudes among management students in Uttar Pradesh, India. Entrepreneurship has been defined as a “life skill,” by the European Union (EU). This chapter explores its inculcation through the configuration approach.

A configuration is a conceptual model expressed by a set of (interrelated) variables. The variables can reinforce each other or block the effects of each other and various sub-groups of variables can represent different domains (Harms et al. 2009).

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This approach was adapted as a conceptual model for tracing the origins of entrepreneurial orientation and start-up inclinations among university students.

An observation of the following four determinants was undertaken: “person i.e. individual personality orientation, course content, education process, and environment” (Frank et al. 2005). In addition to observation, the students were subjected to interview sessions to assess progress.

This chapter contains the author’s reflections on her experiences while conducting entrepreneurship training programs at Shri Ramswaroop Memorial University, Lucknow (Uttar Pradesh). Conviction to work in this zone developed on the identification of students’ deep concern for employment at the culmination of professional degree, their nervousness in facing the placement interviews, and fear of rejection. The author prepared a strong case for introducing entrepreneurship in the syllabus of all courses in the Institute of Management, viz. MBA, BBA, and B.COM(H).

It was visualized that entrepreneurship training would infuse confidence in students and provide them a line of defense in the highly volatile job market. Course content was developed, and various efforts were made to expose students to the concepts. Classroom teaching was supplemented by project-based approach. Exposure to “My Story Sessions,” case studies, site visit of enterprises, and establishment of campus ventures also facilitated the process.

## **2 Review of Literature**

### ***2.1 Rationale for Entrepreneurship Training***

Association with students provided the author insights about their concerns and yearning for a well-paying job at the culmination of their degree program. In most cases, pay was considered a barometer of their ability and used as a benchmark for success. But is the educational system making them job ready? In most universities, the same syllabus is being executed year after year.

With recession cycles and constant flux in the requirements of the job market, job security is a thing of the past. Initial jobs are difficult to come by and competition for them is very stiff. Once the job has been acquired, sustaining it is also a challenge. Herein began the author’s interest and commitment to inculcating entrepreneurial skills in students, developing “job creators” in place of “job seekers.” The objective was to empower students terrified of rejection in the stiff interview processes and to bridge the gap between perceived and actual pay packet. With these thoughts as the backdrop, the author built a strong case for introducing entrepreneurship in undergraduate and postgraduate courses and forwarded the same for approval. The university management supported the proposal.

In this context, Kuratko (2003) observes that “Entrepreneurial education has become one of the hottest topics at U.S. business and engineering schools.”

Moreover, the “number of schools teaching new venture or similar courses has grown from a few dozen 20 years ago to more than 1600 at this time (Solomon et al. 2002; Katz 2003).” McMullan et al. (1988) comment that “entrepreneurship education holds promise as an integral component in a community’s venture support system as part of a new strategy for job creation.” Ronstadt (1990) further expounds on the importance of entrepreneurship and develops a case for integrating it into the curriculum. Zeithaml and Rice (1987) clearly state that there is “difference in training students for entrepreneurial role and training them to be managers.”

In support of the above-mentioned thought process, entrepreneurship was included, as a compulsory course, in the syllabus of MBA (Master of Business Administration), BBA (Bachelor of Business Administration), and B.COM(H) (Bachelor of Commerce—Honors)—i.e., all the courses being executed under the institute banner, with the objective of making the students self-reliant.

Employability statistics in Uttar Pradesh paint a grim picture. The 66th National Sample Survey (2009–10) reveals that one crore of unemployed youth in the age group of 15–35 years will be added to the existing unemployed by 2017. It has been found by a survey conducted by MeritTrac MBAUniverse. Com-Employability report 2102 that “beyond the top 25 B-Schools only 21% students are employable.” Nasscom ET Survey 2011 reveals that only “25% of all Engineering Graduates are employable.”

Hence, there is an urgent need to improve the employability quotient of entry-level professionals and also to create more jobs. The Prime Minister’s “Make in India” campaign is a step in this direction, with the objective of boosting jobs and the economy. Donckels observes that “entrepreneurship constitutes a vital link in the economic growth of a country. Small and medium-sized businesses create jobs and are a seedbed for dynamism and innovation.” “Entrepreneurship education increases the likelihood of self-employed graduates owning a high-technology business,” as concluded by Charney and Libccap (2000) in the Kauffman research series. Also, it was noted by Chusimir (1988) that business schools were “producing specialist but few general managers and even fewer who can tolerate ambiguity, who understand the importance of creativity, intuition and judgment.” There is a need to train entrepreneurs who have courage to take risk and initiate ventures.

According to Bulter (2003), quoting Scott and Twomey (1988), “education for entrepreneurship should be targeted at multiple objectives. Based on a study of 436 undergraduate students in the US, England and Ireland, they conclude that predisposing (background/personality/perceptions) factors, triggering (situational) factors and ‘having a business idea’ act both independently and in concert to shape career aspirations.”

Drawing from the above ideology, an integrated entrepreneurship program was developed and executed at Shri Ramswaroop Memorial University. The process and findings are enumerated and analyzed in the subsequent sections.

### 3 Measures for Entrepreneurial Training

The various measures adopted to inculcate entrepreneurial skills in students are enlisted in Fig. 1. Each method illustrated in the figure has been discussed in detail subsequently.

Hence, as recommended by Bechard and Toulouse (1991), “both pedagogical and andragogical models of teaching” were used for imbibing entrepreneurial skills. Gorman et al. (1997) quote Ulrich and Cole, “Entrepreneurial learning style preferences tend towards active experimentation with some balance between concrete experience and abstract conceptualization.” Plaschka and Welsch (1990) concluded that “as entrepreneurship programs are developed, multiple alternative structures and learning mechanisms are needed to meet the needs of a variety of individuals.” Sexton and Upton (1987) also highlight the need for variety in pedagogical tools used to teach entrepreneurship.

#### 3.1 Board of Studies (BOS)

The head board reiterated its commitment to entrepreneurial learning by nominating an entrepreneur on “The Board of Studies” of the institute. This gave a reality check to the syllabus, tipping it in favor of practical learning as opposed to theory. At earlier meetings, only academic measures were discussed; however, with the presence of a practicing entrepreneur, insights were obtained on practical aspects of learning too. The importance of site visits and industrial training was highlighted

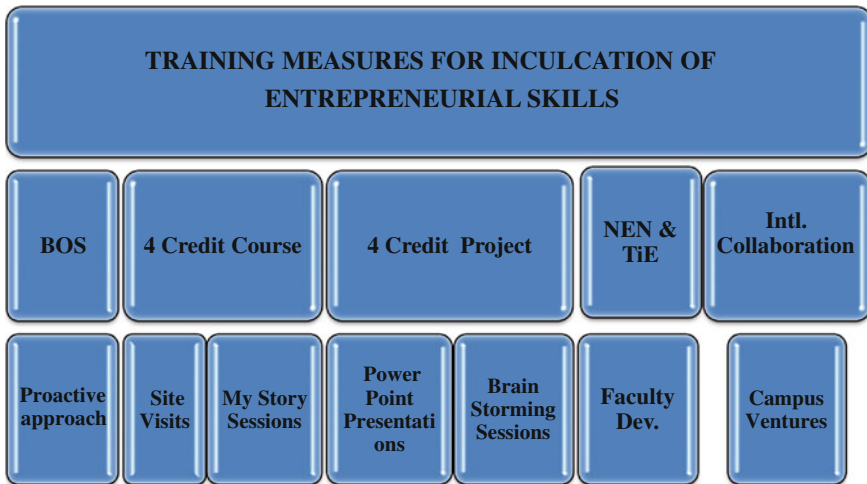


Fig. 1 Training measures for inculcation of entrepreneurial skills

for the purpose of making the students job ready and industry savvy. Sessions by successful entrepreneurs were also viewed as important, for inspiring youngsters to take the entrepreneurial plunge.

### ***3.2 Curriculum Development***

Entrepreneurship courses were developed for graduate and postgraduate students with a view to safeguard them in a highly competitive recruitment scenario and recessionary trends, to promote creativity and proactive behavior and for building lifelong learning systems. The course was also visualized as an insurance against the pink slip in the corporate world. The postgraduate courses were planned to possess greater academic rigor than those at the graduate level.

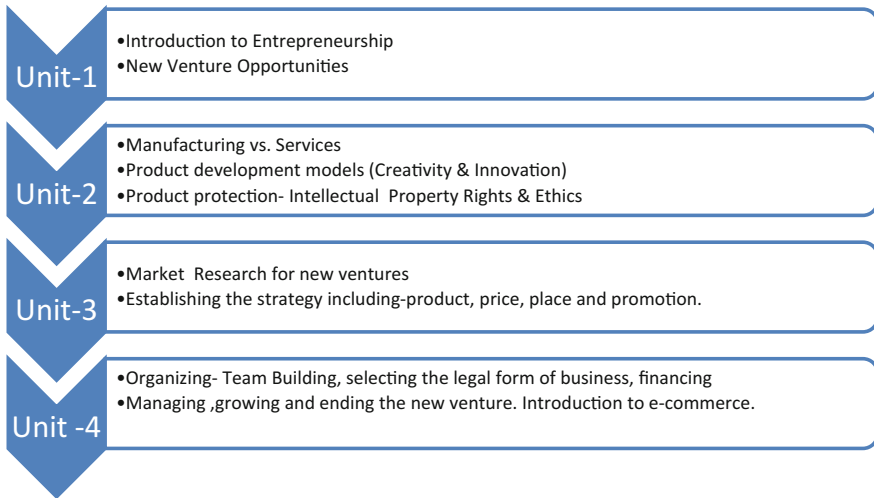
The following observations on curriculum development were gleaned from the review of literature:

McMullan and Long (1987), Vesper and McMullan (1988) and Plaschka and Welsch (1990), in discussing curriculum, emphasize that, curricula of entrepreneurship programs have to be differentiated from traditional management education programs. In addition, they argue that entrepreneurship education should include skill-building courses such as negotiation, leadership and creative thinking and exposure to technological innovation and new product development.

The entrepreneurship course was strategically positioned in the final semester of the study program. It was intended that entrepreneurship should be taught after a basic exposure to various streams of learning: marketing, finance, human resource, information technology, etc., because essentially it is an integration of all knowledge. As stated by Hills (1988), the most important objective of entrepreneurial education is to “increase awareness and understanding of the process involved in initiating and managing a new business enterprise.” It was also intended to provide them with power to face competition in the corporate world, to give them the cutting edge by providing them with the ability to “think through” the confidence to lead and the acumen to grab opportunity and create a niche.

An outline of the course structure is illustrated in Fig. 2. This was conducted for final-year student at Shri Ramswaroop Memorial University. It was observed that students were extremely “marks-centric.” To motivate them to pursue the course with commitment, it was assigned 4 credits and 100 marks. Each week, 3 lectures and 1 tutorial class were devoted to entrepreneurial sessions. Tutorial classes were assigned to promote applied learning. It was observed that tutorial classes with activities showed a marked increase in attendance and student engagement. In the tutorial classes, case studies, PowerPoint presentations, discussion about successful entrepreneurs, role-plays, etc., were conducted. The students were given opportunity to express their ideas.

“Closely related to educational orientation is the issue of learning style. Two chapters utilize Kolb’s learning model to argue the case for adopting an interactive



**Fig. 2** Entrepreneurship course structure: a broad outline

style in teaching to potential entrepreneurs.” This implies that a variety of methods should be used to inculcate skills in students rather than a single approach. The same premise has been followed through the course of the chapter.

### **3.3 Profile of Site Visits**

A variety of site visits were also conducted, in order to expose students to the corporate world and provide them an opportunity to realize how theory translates into action. The students visited the bottling plant of Coke and manufacturing units of Indo Farm Fertilizers and Ceat Tyres at Chandigarh. This excursion made them witness assembly line operations and value the importance of team work in an organization. They also learnt lessons in self-conduction, coordinating groups and the importance of adhering to timelines.

Tour of the harness manufacturing—world-class unit of Karam International, at Lucknow—showed them that strict quality control results in good products that get acceptance in the world market. A visit to the flea markets of Deva—a small hamlet on the outskirts of Lucknow provided students an opportunity for comprehending issues vital in selling to the rural consumer. An operational tour of KFC provided them insights into preparation methods and human resource strategy of a multinational chain.

Some students also undertook a week-long training with Spencers Retail by participating in their corporate gifting program preceeding Diwali. This gave them an opportunity to sell to corporate clients. They learnt to take client rejection in their stride and realized the problems faced in selling to the customer. They also got an insight into market competition and tactics used for capturing market share.

Other students attended an entrepreneurship workshop conducted by TiE (The Indus Entrepreneurs), NEN (National Entrepreneurship Network), and IIT (Indian Institute of Technology) at Kanpur. Here, they got to test their entrepreneurial ideas with the best in the country. This helped them grow in confidence, and they learnt to have faith in their ideas. Opportunities for industry exposure also provide a break from the monotony of academics and make learning enjoyable.

The only limitations faced with the site visits and corporate trainings are that their periodicity has to be balanced, otherwise, it may lead to academic lapses. Additionally it has to be ensured that students are able to glean the intended knowledge from a particular visit, i.e., the learning outcomes are obtained and it is not used merely as an outing.

### ***3.4 My Story Sessions***

‘My story’ sessions were also organized at the university to inspire students. Leading entrepreneurs of the city discussed their business model with them. They also attended sessions organized by Lucknow subchapter of TiE (The Indus Entrepreneurs). Manufacturers and exporters of a wide range of products presented their success stories. The students were surprised to observe their steep progress chart. Through the narrations of a food chain owner, they learnt the benefits and economies of developing ones’ own brand as opposed to franchising. Experiences of a chartered accountant provided them insight into service-oriented consultancy. The narrations of CEO, Reliance Jio—highlighted the relevance of “intrapreneurship”—being a leader within a firm for career growth and outsmarting competition. Secretary of an NGO for rehabilitation of street children discussed social entrepreneurship and the satisfaction derived from the activities. Famed supplier of parts for “Aston Martin” cars spoke about operating internationally. Students were happy to know that parts of a world’s famous car were being manufactured in their neighborhood. Experiencing the inspiring journey of “The Mumbai Dabbawalas,” an organization that delivers 4,00,000 lunch boxes daily in Mumbai to Six Sigma standard, showed the students the power of quality in achieving international acclaim.

An article by Ulrich and Cole (1987) emphasizes the “importance of successful learning experiences in generating and increasing interest in entrepreneurship.” Here, Leclerc (1985) mentions that universities must cultivate their links with the local business community. Hence, “my story sessions” were an important link in taking entrepreneurial learning forward among students.

### ***3.5 Student Assessment***

The students were assessed on the basis of their attendance, performance in class interaction, submission of assignments, and end semester examination. Out of



hundred, forty marks were reserved for in-semester performance and sixty marks for end semester written evaluation. This earned the student four credits.

### ***3.6 Final Project Dedicated to Entrepreneurship***

To provide impetus to entrepreneurial thinking, the final project at the culmination of the degree program was also dedicated to entrepreneurship. Each student was required to prepare a business plan which was perfectly executable and only had to be substantiated with funds. Two hours per week of guidance, one hundred and twenty marks, and four credits were dedicated for the same.

McMullan and Boberg (1991) “compare the project method of teaching entrepreneurship with the case method by evaluating the opinions of a sample of past and present MBA students at the University of Calgary. The results indicated that students generally favoured project-based courses for development of skills related to knowledge, comprehension, and evaluation; whereas case method was perceived as more effective in developing skills of analysis and synthesis.” Ball and Gilligan in (1985) also focus on the “project-based method” for training for small businesses. McMullan and Boberg (1991) concluded that the project method is more effective in achieving most levels of learning defined by Bloom’s Taxonomy of Learning Objectives.

**The students presented a variety of proposals in their project work.** One student proposed setting up of a seafood restaurant. She prepared in detail the menu card along with price projections and the break-even point. Another wanted to set up a DTP center for assisting students in their projects. Yet another wanted to set up a venture for providing low-cost medicines to the poor. Still others wanted to start a tea bar.

A team of two students put forth a proposal for starting a health food unit for students on campus. They prepared a detailed proposal including the marketing plan, complete with logos and brand name. This proposal was approved for implementation on the university campus. Named “Sweet Chillies,” it gained a lot of popularity on the campus and gave stiff competition to the campus canteen. Upon graduation of the students, the campus venture was wrapped up. However, students continue to have three satellite centers across the city, which they manage alongside their job.

At the conclusion of the project work, it was observed that while the students fared relatively well in reproducing matter learnt in class, most of them were hesitant in preparation of project reports. They needed a lot more hand-holding when compelled to think innovative ideas individually. Project work helped them develop their creativity. For the preparation of each project, several iterations were needed. From observation of students, it was inferred that more emphasis in entrepreneurship training should be placed on individual thinking and developing the power of visualization. As expounded by Brawer (1997), “the use of computer simulations was encouraged in project making but the students were required to

remain grounded in real life situations.” The project report submission was evaluated so as to give weight to in-semester performance, regularity, and end semester submission and presentation of project report.

### ***3.7 International Collaboration for Training Students in Entrepreneurship***

An opportunity to collaborate with an American NGO for entrepreneurship training emerged after a meeting with their representative. The organization was a nonprofit organization dedicated to the continuing education, development, and training, of servant-oriented, socially responsible, entrepreneurial business leaders. They used well-established and successful business people to teach from their rich experience on the campuses of major universities in India. Started with nine faculty members, they graduated their first cohort of students in June of 2012.

Their objective is to provide college students’ personal classroom training through a metric of six key courses on entrepreneurial leadership. Each course is led by mature proven business professionals for maximum impact. They select and train the course facilitators from among the best and brightest in B2B and B2C business, industry, government, and the nonprofit sectors. The cornerstone of their educational philosophy is “**Dream-Design-Deliver.**” “Field tested curriculum and well established Socratic teaching methods are used to install a world view of strategic social responsibility.”

After several rounds of discussion, an alliance was forged between Shri Ramswaroop Memorial University and the partnering NGO for a six-month certification course in entrepreneurial leadership. Motivating students to attend the session was difficult. Most joined due to persuasion, some joined for interaction with Americans, and others did not want to invest money. Finally, a total of fifty-two students were motivated to join the course. Of these, fifty students earned the certification, while two were unable to meet the attendance criterion. A three-week contact program was planned spanning the period January to May 2014. The classes were executed from 9 am to 4 pm with lunch and tea breaks. Engineering this three-week module onto a running semester was a huge challenge. Most classes were scheduled on holidays, compounding the challenge to gain student attendance. The third module was scheduled after the end semester examinations. The prospect of retaining students after examinations appeared to be futile. Yet we proceeded to implement the program within the given constraints wanting to maximize the opportunity provided by the collaboration.

The students were taken through sessions that helped them discover their unique areas of proficiency and interest, provided an insight into the skills required of an entrepreneur, were given tips on what comprises a successful entrepreneur, exposed to various business models, and apprised on India-specific guidelines. “Chaganti and Greene (2002), emphasized local involvement of entrepreneurs in

entrepreneurial training while Johannisson (1991), sensitized to social contribution of business.” The students were taken through ethical dilemmas which were likely to emerge and given lessons in leadership.

The contact program was followed with continued internet interaction, using skype and other apps to promote student development. Syllabus was based on real-life experiences. Pedagogy consisted of lecture and discussions by a group of instructors in conversational style, powerpoint presentations, video clips, cultural exchange, and personalized attention were used as teaching tools. Dana’s chapter (1987) also suggests that “entrepreneurial learning style preferences are consistent with active participation and that increased opportunities to participate in the classroom would increase student awareness and enhance the ability to learn from experience.”

**Profile of American Trainers:** Most trainers were aged between 40 and 65 years and were of American origin with years of successful experience behind them. They were all highly motivated individuals and talked with immense conviction.

**Student Feedback:** Interaction with foreign nationals gave them a huge confidence boost. Their fascination kept the attendance high and promoted cross-cultural communication. They were deeply riveted by teaching style which was “conversational” in nature interspersed with anecdotes and video clips and encouraged participation. However, due to cultural divide, very few of them were able to avail the Internet teaching sessions or attend off-campus meetings.

Attendance marked a high in the first week, plateaued in the second week, and soared again in the third week. It was surprising to note that students who did not attend their regular classes turned up for these sessions. Since the session was superimposed onto a running semester, most classes were scheduled on holidays. Hence, attendance was a challenge. But the students kept attending even in the summer break after the conclusion of the semester examinations. This was worthy of appreciation and formed an important observation.

**Faculty Feedback:** Five faculty members also attended the program. They were appreciative of the interactive teaching style which created instant bonds with students. This was found to be more effective than teacher monologues.

**Trainer Feedback:** The trainers were satisfied with the student response but felt that they were unable to do justice with the training because off-campus the students were not forthcoming. The proposed internet interactive sessions did not prove to be very successful.

**Presentation of Projects:** The projects exhibited tremendous creativity and detailing. They were conceptually very well planned with designing of logos, brand names, and marketing strategy. It was observed that students with business background were not necessarily more motivated. Students with service background also displayed great creativity when it came to planning new ventures.

### 3.7.1 Advantages of the Foreign Teaching Collaboration

1. **Personal engagement of Student with Business Professional**—SRMU (Shri Ramswaroop Memorial University) students directly discussed, engaged, and dialoged with business and social venture executives from North America. SRMU students had personal, immediate, and ongoing access to their American professional teachers over a six-month window as they developed their plan for a social venture or business.
2. **International Faculty Collaboration**—The relationship blended the best aspects of a robust modern education: the skilled and rigorous academic focus of SRMU with tested, successful businessmen and women from America, combining practical and theoretical concepts and that cultivated student learning.
3. **Real-Time Business and Social Venture**—Each student group of 6–7 students developed a functioning business or social venture, executable within their environment. Theoretical development is not sufficient; hence, the emphasis was on real-world applications, enabling students to create plans and systems that work. Venture capital was the only thing they would require.
4. **Integrated Indian and American Dynamics**—The collaboration marked the coming together of professionals, of two very strong traditions of life and work. The program was not merely an American import, nor exclusively Indian, but a balanced blend of the strengths of both cultures and dynamics of entrepreneurship.
5. **Leadership Development**—The partnership was committed to grow each individual student in their own personal leadership capacity. Students were, therefore, compelled to discover and develop their own skills and abilities and their own personality.
6. **Project Management**—Student teams of 6–7 integrate skills such as time management, practical cost, strategy and healthy team management in order to launch and sustain a successful enterprise.

### 3.7.2 Limitations of the Collaboration

1. The cultural differences generated interest but also created a divide. The students were not so receptive to Internet interactions and did not respond to requests of meetings off-campus.
2. Not much time has elapsed since the training. Hence, conversion of training into real ventures cannot be measured.

### **3.8 Interaction with NEN and TiE at IIT Kanpur**

Efforts were made to link the Shri Ramswaroop Memorial University (SRMU) campus with the National Entrepreneurship Network (NEN) and The Indus Entrepreneurs (TiE). Faculty members attended the sessions to promote entrepreneurship across Uttar Pradesh. NEN contact person shared the observation that often under-utilized faculty is sent across for these sessions and priority is not given to entrepreneurial training. Hence, there is lack of trained resource personnel for the domain.

## **4 Effectiveness of the Initiative Taken for Entrepreneurial Training**

After the execution of various initiatives taken for infusing the spirit of entrepreneurship in university students at the graduate and postgraduate levels, the following observations were made:

- Created proactive workers, willing to take responsibility and handle a risk trade-off. It grew the students from ignorance to awareness of the concept.
- Students presented group and individual projects, which were planned for execution. These projects will stay with them for life, giving them confidence. They may implement it after gaining experience or use it as a backup for cases when employment runs into troubled waters. It ignited the spirit of entrepreneurship and the “can-do” spirit. It helped students discover their strengths and aided them in their final placements.
- It introduced them to the concept of “intrapreneurship” which will provide students a cutting-edge vis-a-vis competition in the corporate world. “Intrapreneurship (corporate entrepreneurship) and the need for entrepreneurial cultures have gained much attention during the past few years” (Zahra et al. 1999a, b; Kuratko et al. 2001; Schindehutte et al. 2000).
- Almost all students reported the desire to pursue their own business after gaining experience, funds, and confidence by working for a few years.
- Many students started viewing the university as an opportunity and decided to start campus ventures after the completion of their program.
- One campus venture is already in operation, and many more are on the planning table. The registrar receives proposals every day for campus ventures. Three students from the undergraduate courses initiated a campus eatery. They started with limited snack dishes and have gradually widened their food offering.
- A chain process of knowledge dissemination has also started wherein seniors are passing on entrepreneurial aspirations to juniors who have not officially been inducted into the program.
- It is anticipated that these measures will spin off commercial start-ups in a year.

In a nutshell, the multi-pronged approach to entrepreneurial learning proved to be effective in igniting interest for entrepreneurship. Findings of student interview sessions are given below.

As exhibited in Fig. 3, 75% students who attended the entrepreneurship program reported a desire to pursue their own business and felt they had received sufficient learning. Kantor (1988) “in a survey of 408 university students reveals, that students were found to believe that both the traits and abilities needed by entrepreneurs could be taught, with abilities perceived as more readily influenced.” Also, Bird’s research in 1989 shows that there is no significant difference in the abilities and motivational patterns of male, female, or minority entrepreneurs.

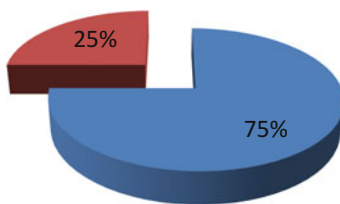
This implies that multi-pronged training can motivate students to take a plunge into entrepreneurship. These can be important inputs for government initiatives promoting entrepreneurship.

As exhibited in Fig. 4, almost 80% of the students interviewed were inspired to develop new business ideas and make a foray into entrepreneurship. Hence, we deduce that training and motivation can encourage creativity and innovation. There is need to highlight the achievements of entrepreneurs in order to inspire a new generation of entrepreneurs.

As shown in Fig. 5, 85% students felt that entrepreneurship training fostered social and leadership skills. In this context, an article by Harrison and Leitch (1994)

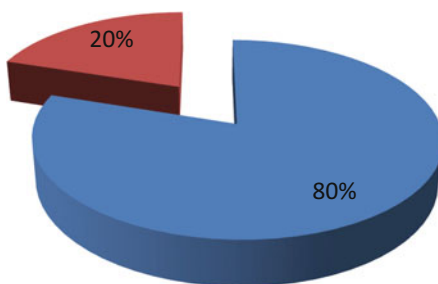
**Fig. 3** Student interview outcome 1: Desire to pursue own business after the training

**75% Students reported desire to pursue own-business and felt they had received sufficient learning**



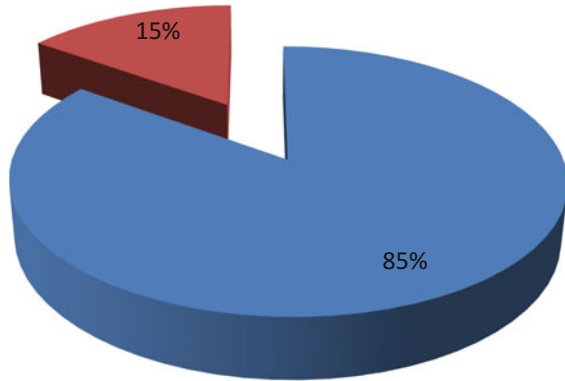
**Fig. 4** Student interview outcome 2: Inspired to develop new business ideas

**80% students were inspired to develop new business ideas**



**Fig. 5** Student interview outcome 3: Student views on training effectiveness

**85% students felt the training was effective and fostered social and leadership skills**



argues for “the need to utilize recent developments in the field of leadership research when studying entrepreneurship. The authors suggest that leadership and organizational transformation and continuous learning are themes that reflect the new paradigm associated with entrepreneurship education.”

#### ***4.1 Specific Cases of Student Development that Merit Attention***

**Case 1: MBA Student, having advocate father with poor self-esteem and communication skills**—Entrepreneurial training, interaction with American delegates, personalized attention, and “my story sessions” infused him with such confidence that he could visualize himself surmounting all obstacles to achieve his objectives.

**Case 2: MBA Student inspired to be front runner in placement activities.** Student who was inherently aggressive by nature was motivated to work in teams during sessions and went on to play a proactive role in placement activities, contacting companies, and motivating colleagues to apply and attempt job interviews.

**Case 3: PGDM Student—lacking self-knowledge—discovered mission in life.** For this particular student, the training proved to be a transformational experience. He went through a journey of self-discovery, identified his core competencies, and set new targets with enhanced confidence.

**Case 4: BBA Student—father government servant—founded a campus venture.** This student discovered entrepreneurship to be his calling in life. He decided to breathe life into his final project, took permission from university

authorities, and established the first student venture, on campus. Initiated with serving three snack offers, he gradually expanded his range of products. His success inspires many, and he is planning to spin off more ventures by motivating and financing other students. As concluded by Kirby and Mullen (1990), “action learning can help develop the requisite competencies in students.”

**Case 5: BBA Student—with unemployed Nepalese father—joined university admission cell to earn his fees.** A very diligent student who was always struggling with fee issues as his father, the sole earning member of the family, had lost his job. After entrepreneurship sessions, he decided to be proactive and offered to serve in the university admission cell to earn his fees. He has also put in a proposal for starting a campus venture. In the evening, he helps to maintain the books of a small local firm.

Most students keep coming back for advice on new venture creation. It is attempted to take them onto higher learning curves by encouraging them to think out of the box.

### 4.2 Development of Framework for Entrepreneurial Training

Based on the experiences in entrepreneurial training, the following framework was developed for inculcation of entrepreneurial skill in the youth:

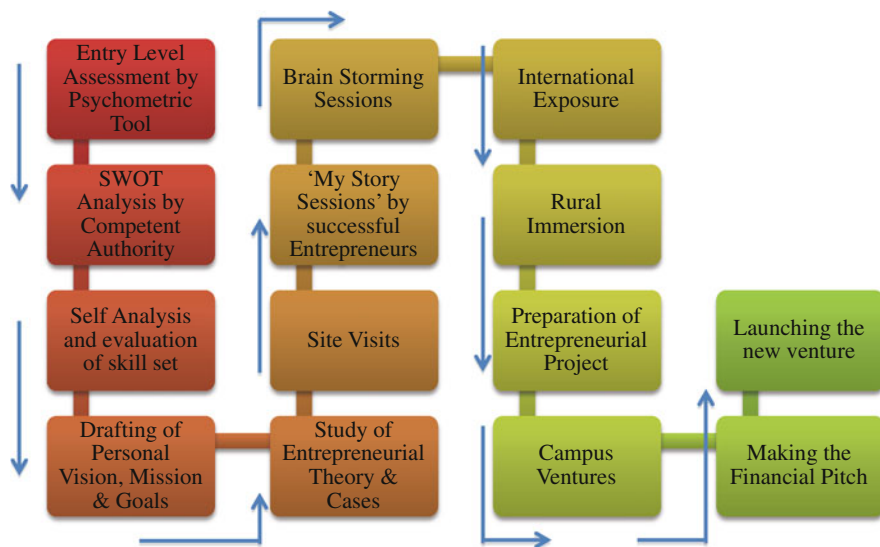


Fig. 6 Framework for Entrepreneurial/Intrapreneurial training



The above model (Fig. 6) has evolved from experiences in training students for entrepreneurship using a multi-pronged approach. It has been inspired by Latika Sahni's model for inculcation of soft skills published in *BVIMR Management Edge*, Vol. 4, No. 2 (2011), pp. 40–47.

The model/framework has been described in the following steps:

1. As the student enters engineering, management, or any other course at the graduate and postgraduate level, a detailed personality assessment must be conducted using **psychometric tool**.
2. This is to be followed by a **SWOT** (strength, weaknesses, opportunities, and threat) analysis by a competent authority involved in entrepreneurial training.
3. Then, the candidate must execute a **self-analysis** and an honest evaluation of his skill sets. There should be clarity regarding personal core competence and black spots.
4. Keeping in mind the feedback received from psychometric tool, SWOT analysis by competent authority and personal evaluation, the candidate must draft a **personal vision, mission, and goals** statement to know the thrust areas for the future.
5. The candidate must participate in **brainstorming sessions** with faculty, peers, and experts to judge the value of his opinions and ideas.
6. Candidate should take part in "**my story sessions**" by successful entrepreneurs in order to develop inspiration to initiate a new venture, resilience in the face of obstacles, and the perseverance to persist in the face of temporary failures.
7. Participation in **site visits** will reveal to the candidate how successful companies are organized in terms of both infrastructure and manpower. This will enable the candidate to develop an image for his own company and understand the speed with which growth is to be propelled.
8. Study of **entrepreneurial theory** will inculcate the basic principles and reduce learning time. Review of a variety of cases will provide insight into the problems and situations faced and provide practice in strategizing and finding solutions.
9. A brief period of **international exposure** will ensure that the aspiring entrepreneur has a worldview and an eye for international markets. When required, he will be equipped to give an international thrust to his business and gain economies of scale and other associated advantages.
10. A brief period of **rural immersion** will ensure that he has knowledge of how the rural markets operate. This knowledge will be beneficial as about 60–70% of India is still living in villages.
11. Preparation of the **entrepreneurial project** will provide practice in thinking an idea to completion. It will involve crystalizing the idea, putting it into practice, making projections of the finances, raw materials, and infrastructure requirements, etc.
12. The students must be encouraged to initiate and run **campus ventures**. Such operations at the microlevel will provide them confidence to operate on bigger platforms and face market forces.

13. The candidate must possess the confidence and style to make presentations for **financial** support, which may be required at the initial level or for the purpose of expansion.
14. Having gone through this evolution process, it is visualized that the candidate will be confident to take the **entrepreneurial plunge**. In case he wishes to pursue a job, he will be in a strong competitive position as an “intrapreneur” to outshine his peers and ascend the corporate ladder.

Therefore, it is recommended that each student at the graduate and postgraduate level must go through an entrepreneurial training module. Inculcation of this skill will ensure success of the “Make in India” program and boost the national GDP.

### **4.3 Recommendations**

The above-mentioned experiments in entrepreneurship training led to the following recommendations:

- Better profile of teachers needs to be inducted for entrepreneurial training, preferably people who have experience in the area. Currently, it is being taught by any teacher who is willing to teach it, as a theory subject. American trainers were able to capture student attention owing to their varied experience and exposure. Filion (1994) also acknowledges “the importance of teachers in imbibing the entrepreneurial spirit in students.” Gibb (1994) stresses the competency of the trainer too.
- Teaching methodology also needs to be more conversational and practical as opposed to theoretical for entrepreneurial development.
- Assessment pattern should be based on what students can demonstrate in the form of projects, pilot programs, and conceptual development rather than on reproduction of theory.
- Extracurricular activities done in the zone of entrepreneurship such as attending sessions at IITs and IIMs should be quantized into marks.
- Starting a campus venture must also reflect in grades, or a special recognition should be given to the concerned student. Often, attempts are made to curb student aspirations and dampen their enthusiasm for the fear of low attendance and marks due to business distraction.
- Attempts have to be made to disengage perception of entrepreneurship as a management discipline.

The above are personal views resulting from experience of working in the area of entrepreneurship promotion. The scope of entrepreneurship is much wider and more interdisciplinary in nature. McMullan and Gillian (1998) emphasizes “the importance of entrepreneurship education to economic development and views entrepreneurship education as a component of the community support infrastructure.”

#### **4.4 *Limitation***

The study is based on the experiences and observations of the author, working in an emerging university (Shri Ramswaroop Memorial University) located in Uttar Pradesh, India. The measures listed above may not be universally applicable.

Also, the study is limited to the responses provided by students belonging to the disciplines of management and commerce with varied cultural and economic backgrounds. Since the entrepreneurial ecosystem is relatively new, not many perspectives are available on the conversion of training into real-life businesses. Most students reported that they wanted to gain work experience of 1 to 2 years before initiating their own venture.

#### **4.5 *Indicators for Further Research***

This chapter focuses broadly on the combined impact of a host of training measures. Although from literature review, it was ascertained that in entrepreneurial training, process has more impact than course content, and more detailed studies are needed to isolate the precise impact of different processes of imparting entrepreneurial training. Also, the role of faculty in inspiring students toward entrepreneurship needs to be analyzed. Impact of gender perspectives in entrepreneurial training also needs to be studied to promote entrepreneurial activity among women as suggested by Butler (2003).

### **5 *Conclusion***

Collectively, the above measures ignited the spirit of entrepreneurship in students, helped them in final placement, and imbibed “intrapreneurial” skills and gumption to handle risk. Students grew from ignorance to conviction of the concept. As stated by Kantor (1988), it was observed that “Entrepreneurship can be taught.” Knight (2000) observes that “potential entrepreneurs can be encouraged (and discouraged) by business school programs.”

These modules were found to be advantageous to insure students against recession cycles, flux in requirements of job market, and the dreaded pink slip. The goal was to develop job creators as opposed to job seekers. Communication is the key to highlight the relevance of entrepreneurship across disciplines. Top-down, application-oriented approach was found to be successful. Wyckham 1987 in his research findings in Canada stated that universities have a role to play in the pre-start-up, start-up, and post-start-up stages of the entrepreneurial education process. Hence, universities in India too, must gear up for the social transformation that they can usher in by training students for entrepreneurship. Mobilizing the

youth, through entrepreneurial training, will contribute to nation building and the Prime Minister's "Make in India" campaign.

Hills (1988) commented that entrepreneurship education was in an evolving stage. Development will take place by experimentation with various programs, course attributes, pedagogy, and measurement of learning outcomes. The role and quality of faculty for training incumbents were also of prime consideration. Ulrich and Cole in 1987 also highlighted the connection between entrepreneurship and college campuses. The present chapter is an attempt to catalog a variety of avenues available for training students in entrepreneurship. Being based on real-time observations, it has important implications for entrepreneurial training in India.

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**Part IV**  
**Experiments with Target Groups**

# Chapter 16

## Impact of Entrepreneurship Education on Entrepreneurial Intentions of Potential Entrepreneurs in India

Deepali, Sudhir K. Jain and Harish Chaudhary

**Abstract** This study explores the impact of entrepreneurship education on entrepreneurial intentions of potential entrepreneurs in India. To this end, a government-sponsored skill and development programme has been critically examined in the study. It is envisaged that such programmes would advance entrepreneurial intentions among potential entrepreneurs. In order to determine the impact of entrepreneurship education on entrepreneurial intentions, 164 students were sampled and the data were collected from two groups formed from the sample: one which had received a 6-month formal entrepreneurship education and the other which did not. A survey technique was used to critically examine the impact of entrepreneurship education on the receiver and non-receiver groups. Findings suggest (1) significant contribution of training and skill development on the receiver group and (2) level of general education that has a negative impact on entrepreneurial intentions. The study may enable policy makers to formulate entrepreneurship education programmes for potential entrepreneurs who may be unemployed, semi-literate, and underemployed and non-entrepreneurial society.

**Keywords** Education · Entrepreneurship education · India · Potential entrepreneurs

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## 1 Introduction

Entrepreneurship has boosted the economy of many developing as well as developed countries. Due to its economic importance, entrepreneurship education has been considered an important factor in understanding entrepreneurship and encouraging it among scholars and potential entrepreneurs. In order to adopt a systematic approach towards entrepreneurship, entrepreneurship-oriented educational programmes are becoming the focal point in education system across regions (Gorman et al. 1997; Lourenço et al. 2013a, b). **Consequently**, unique entrepreneurship courses are unified with research-grounded entrepreneurship programmes (Bécharde and Denis 2002) so that entrepreneurship can be encouraged and understood. The impact of education on entrepreneurship varies according to geographic locations. For instance, in the USA, entrepreneurs have a slightly higher return on their education as compared to employees, whereas for European entrepreneurs, returns on education are slightly lower than those for employees. In case of entrepreneurship schooling, USA has higher returns than those of Europe (Trostelet al. 2002). Entrepreneurship education is also affected by cultural differences; therefore, its impact also varies by region and across countries (Lee et al. 2005; Acs and Storey 2004; Audretsch and Keilbach 2004). However, the entrepreneurial mindset is characterized by some common attributes such as innovativeness, risk-taking propensity, interest in starting own enterprise and proactiveness. Earlier, people used to think that these skills are inborn characteristics and cannot be developed, but with time, the perception of people changed and it came to be accepted that education and training could develop entrepreneurial skills. The magnitude of these skills changes as per the environment and differs organizations to organizations (Jain and Ali 2013; Armington and Acs 2002). The belief that “only a son of entrepreneur can be a potential entrepreneur” has now completely changed. Entrepreneurship education has played a vital role in changing this perception. Although the perception about entrepreneurship has changed across regions, but the intention to start own enterprise is still followed by ambiguity.

In India, entrepreneurship education is available only at higher educational levels and has so far been neglected in early stages of schooling (Mitra and Mathew 2008). In the USA, high school students are reasonably familiar with entrepreneurship. Exposure to entrepreneurship may result into development of entrepreneurial intentions which might in turn translate into entrepreneurial activity in future. Dickson et al. (2008) found that education had a significant positive impact on entrepreneurial outcomes and positive effect on entrepreneurship.

India is a developing factor-driven country (GEM). In 2003, GEM reported that India was one of the 21 “the next most active” entrepreneurial countries (GEM 2000), yet was ranked 16th in terms of education and training. The lack of entrepreneurship education can be attributed to the low level of education, lack of education and training, negative perception about entrepreneurship, negative



intentions towards entrepreneurship and lack of quality mentorship support available to potential entrepreneurs.

It has been found in recent studies that education in developed countries is directly proportional to entrepreneurship activity but inversely proportional in developing countries (GEM India report 2010). It would be interesting to see if the same results are applicable in an Indian context. Levenburg and Schwarz (2008) tried to find out the relationship between education and entrepreneurship in context of India but the results remain inconclusive to explore such relationship. In this paper, we examine the impact of entrepreneurship education and general education levels on intentions of starting a new venture and interest in becoming an entrepreneur, respectively.

### ***1.1 Cultural Context***

Culture affects entrepreneurial intentions (Hofstede 1991) which is true for India as well (McClelland 1961). Indians are spiritually motivated and prefer peace of mind in workplace rather than work and productivity. The caste system is very prevalent in India, and researchers have found that caste compels a person to adopt family occupation and prevents to enter into entrepreneurship (Gadgil 1959; Medhora 1965; Weber 1958). Such limitations give rise to low entrepreneurial activity. In addition, Indian families prefer to have a job that provides consistent monthly earning. As a result, potential entrepreneurs give preference to jobs (over entrepreneurship) that raise status and position in society while providing consistent earning. Sometimes, entrepreneurs also become job seekers for the marriage purposes as bride's parents prefer an employee to an entrepreneur. These factors might not affect entrepreneurship education directly but do influence entrepreneurial behaviour in one way or the other. Such limitations pose a threat to entrepreneurial development. Extant literature also asserts that culture remains a very strong barrier to entrepreneurship and is deeply embedded in entrepreneurial intentions.

### ***1.2 Entrepreneurship Education in India***

India has received a pioneering status in the field of entrepreneurship among developing countries. India is ahead in offering entrepreneurship education and training programmes in comparison with other developing countries. Table 1 shows the structural distribution of entrepreneurship education in India.

National Institute of Small Industry Extension Training (NISIET), Hyderabad, started entrepreneurship courses in the early 1960s in association with McClelland. Other institutions such as IIMs, IITs, ISB and EDII also started academic programmes in entrepreneurship lately. Most public and private colleges are now in the process of

**Table 1** Structural distribution of entrepreneurship education in India

Central government	State government	Non-governmental
Ministry of Small Scale Industries (SSI) Development Commissioner (DC-SSI)		Non-academic institutions— Banks Financial institutions NGOs
<i>Training institutes</i>	<i>Training institutes/agencies</i>	<i>Academic institutions</i> (Offer elective courses, incubation, executive education programmes, may be Ph.D. in entrepreneurship)
National Institute of Small Industry Extension Training (NISIET), Hyderabad	Directorate of Industries	Indian Institutes of Technology (IITs)
National Institute for Entrepreneurship and Small Business Development, Noida	State Financial Corporations (SFCs)	Indian Institutes of Entrepreneurship education in India
Small Entrepreneurs Promotion and Training Institute (SEPTI), Tiruvalla, Kerala	State Industrial Development Corporation (SIDC)	Indian Institutes of Management (IIMs)
	State Industrial Investment Corporation (SIIC)	
Indian Institute of Entrepreneurship (IIE), Guwahati, Assam	State Small Industries Development Corporation (SSIDC)	Indian School of Business (ISB)
Integrated Training Centre for Industries, Nilokheri, Haryana		Universities and Colleges (public and private)
		Autonomous Training Institutions NISIET, Hyderabad* EDII, Ahmedabad <sup>a</sup>

<sup>a</sup>Provide short-duration training programmes, and the long-duration diploma programmes, seminars, workshops and conferences

establishing cells/centres/departments/incubations to nurture entrepreneurship through education and training. These institutes hire faculties and trainers to provide appropriate entrepreneurial knowledge. Despite significant initiatives taken by institutes and government, there has been a constant shortage of faculties/experts in the domain of entrepreneurship education; most teachers do not specialize in entrepreneurship. The reasons for their teaching entrepreneurship are as follows: (1) they are asked by their institute to teach the subject; (2) entrepreneurship is a thriving subject in India and has received much national and academic attention; (3) entrepreneurship is an interdisciplinary subject and requires knowledge of other subjects as well so it is easy to teach entrepreneurship along with core course; (4) various entrepreneurship-related programmes such as EDPs and EACs are funded by government agencies. India has experienced entrepreneurial growth in recent

years, though Indian culture used to be not conducive to entrepreneurship. Economic growth and political changes in India drew Indian youth towards entrepreneurship significantly (Levenburg and Schwarz 2008). However, India lacks proper entrepreneurship education because of inappropriate design and delivery of learning. The present education system is teacher-centric which is limited to hypothetical business plans, book learning and maximization of grades. It has been suggested that entrepreneurship education should have active learning and student-centric approach. The Indian education system replicates best practices from the USA and Europe, which are appropriate in their environmental conditions but seem to be unsuitable in context of India or developing nations as it ignores the local environmental and cultural needs, e.g. the social status of entrepreneur and infrastructure for entrepreneurship. As India is a factor-driven country and dependent on locally available resources, one is interested in exploiting the opportunities available locally. It is learnt from the literature that entrepreneurship education in India received attention in recent years and India was found to be more entrepreneurial than other developing countries. Table 2 provides India's entrepreneurial comparison with that of Asia's average.

These measures may not be related to the ecosystem of starting a new business directly, but they surely add to the competitiveness of potential entrepreneurs when it comes to "gain from training in entrepreneurship". Data show significant gain in attitude, awareness and activity from entrepreneurship training, but insignificant activity to start own business, and fear of failure. In addition, media is also not very attentive towards successful entrepreneurs as the status of entrepreneurs is Asia's below average, though India is above average in parameters 1–9. India shows significant gain from entrepreneurial training in terms of attitude, awareness and intention, but lacks in activity. India reported a net increase of three per cent in total early-stage entrepreneurial activity from 2000 to 2013.

Enterprise creation should be strongly backed by strong entrepreneurial intention for it to be successful. To deal with above-mentioned perceived barrier, entrepreneurship education is a precondition (Lee et al. 2005). Hence, entrepreneurship education is essential to enhance intentions, deal with fear of failure and engage in relevant entrepreneurial activity. Literature states that entrepreneurship education is instrumental in developing an entrepreneurial mindset (Dickson et al. 2008; Mitra and Mathew 2008; Gorman et al. 1997; Matlay 2008; Béchar and Grégoire 2002; Pittaway and Cope 2007; Ronstadt 1985; Gibb 1993; Bhandari 2006).

### ***1.3 Importance of Entrepreneurship Education***

Entrepreneurial climate in any country is measured on nine parameters. Out of nine, education and training, government policies, and cultural and social norms are considered national strengths and weaknesses (GEM 2002). National Knowledge Commission of India (2008) reported that education is vital for skill development

**Table 2** Entrepreneurial comparison—India and Asia average

Parameters	India (factor-driven)	Source
(1) Perceived opportunities (Pacific and South Asia average = 34.2)	41.4	GEM (2013)
(2) Perceived capabilities (Pacific and South Asia average = 39.7)	55.7	GEM (2013)
(3) Fear of failure (Pacific and South Asia average = 41.5)	38.9	GEM (2013)
(4) Entrepreneurial intentions (Pacific and South Asia average = 20.9)	22.7	GEM (2013)
(5) Entrepreneurship as a good career choice (Pacific and South Asia average = 61.2)	61.4	GEM (2013)
(6) High status to successful entrepreneurs (Pacific and South Asia average = 68.1)	70.3	GEM (2013)
(7) Media attention to successful entrepreneurs (Pacific and South Asia average = 72.9)	61.3	GEM (2013)
(8) Total early stage entrepreneurial activity in 2013	10%	GEM (2013)
(9) Total early stage entrepreneurial activity in 2000	More than 6%	GEM (2000)
<i>Gain from training in entrepreneurship</i>		GEM (2008)—special report on education and training
<i>Awareness</i> : know someone who recently started a business	1.8**	GEM (2008)
<i>Intention</i> : expected to start a business in next 3 years	1.6***	GEM (2008)
<i>Activity</i> : nascent or new entrepreneur	1.3	GEM (2008)
<i>Attitudes</i> : (a) good opportunity to start a business in own area	1.6*	GEM (2008)
(b) have skill, knowledge to start a business	2.3***	GEM (2008)
(c) would not start a business in case it might fail	0.7	GEM (2008)

Key to statistical significance levels: \*low ( $p < 0.1$ ); \*\*medium ( $p < 0.05$ ); \*\*\*high ( $p < 0.01$ )  
For parameter 1–10 = % of population aged 18–64

and elementary to entrepreneurship and innovation. Such skills can be developed through quality vocational training or skill development programmes. Entrepreneurship is highly multidisciplinary in nature and requires entrepreneurial skills to be embedded in education. It involves a holistic approach to deliver critical, analytical, logical, creative and empathetic needs. In the USA, high school students have a reasonable understanding of entrepreneurship (Lee et al. 2005). According to GEM (2008), universities may provide some entrepreneurial education but the curriculum is not designed to train students for the creation of enterprise, rather, it is more like a framework of an academic education. Entrepreneurship education and

training push potential entrepreneurs to take initiatives, responsibility and risks by using creative thinking process. Though entrepreneurship education should not be misunderstood with enterprise education, yet it should enhance students' ability to capitalize on opportunities and enable them to visualize the impact of decisions. However, entrepreneurship education is not just about business creation; it is a holistic approach to anticipate and respond to societal changes. The difference between enterprise creation and entrepreneurship results into different understanding for the need of entrepreneurship education. Béchard and Grégoire (2002) found that a number of theoretically relevant issues remained untouched in entrepreneurship education. Such issues created a gap between theory and practicality of entrepreneurship. Different countries have different educational needs. For developed countries, the definition of entrepreneurship education is creativity, innovation and thinking outside the box whereas for developing countries, it is more about developing positive entrepreneurial mindset and generating self-employment (GEM 2008). Still there is no generally accepted definition of entrepreneurship and entrepreneurial education.

GEM (2008) defined entrepreneurship education as *“the building of knowledge and skills ‘about’ or ‘for the purpose of’ entrepreneurship generally, as part of recognized education programs at primary, secondary or tertiary-level educational”*.

The key question here is how general education is different from entrepreneurial education provided that entrepreneurial education is a highly interdisciplinary and multidisciplinary subject, and how it can be defined for all? May be it is still a matter of discussion to generalize the definition? All the components that have been added to entrepreneurship for years are directly or indirectly related to educational needs and such components are innovation, technology, management and psychology. Dickson et al. (2008) studied related levels of general education to entrepreneurial success. The inclusion of education in entrepreneurship is not new; it has already been considered as an important component for entrepreneurship (Ronstadt 1985). Educational needs arose with the evolution of entrepreneurship and exactly that could be taught to potential entrepreneurs. Drucker (1958) mentioned that entrepreneurs can be created with proper teaching; in 1945, Harvard University started its first academic programme in entrepreneurship.

#### ***1.4 Inclusion of Entrepreneurial Education in Curriculum and Selection into Entrepreneurship***

Béchard and Grégoire (2002) found that there were four reasons responsible for lack of entrepreneurship education: (1) while teaching, educators face pedagogy difficulties, e.g. how to teach so that entrepreneurship students and practitioners develop skills according to the content? (2) Lack of entrepreneurship-specific courses. (3) Less incentives for teaching entrepreneurship as compared to core

courses. (4) Lack of legitimate forums for entrepreneurship publications. Moreover, entrepreneurial outcomes such as entrepreneurial skills, knowledge and attitudes do not match with the needs of entrepreneurship graduates. This misleads entrepreneur's perceptions to differentiate between actual and future entrepreneurial needs (Matlay 2008). In India, academic programmes are inadequate for teaching entrepreneurship. There are very less degree-awarding programmes and fewer possibilities for entrepreneurship research and publications. Early-stage entrepreneurship education is completely missing (Mitra and Mathew 2008). Therefore, it is vital to understand that entrepreneurship education and general education are two different facets of teaching. However, the content may be more or less similar but the pedagogy and orientation are entirely different. It has been found by many scholars that the influence of entrepreneurship education on potential entrepreneurs is different from that of general education.

As noticed by Pittaway and Cope (2007), entrepreneurship education influences the propensity and intentionality of students while there is no relationship between general education or schooling level and selection into entrepreneurship (Van et al. 2005). However, a significantly positive relation was found between performances in the entrepreneurial sector and schooling. On the other hand, found a significant effect of education in entrepreneurship choice and performance. No research has come so far which may show a significant positive relation between general education and entrepreneurship (GEM 2004; Van et al. 2005), but there is evidence which suggests that there is a positive link between entrepreneurship education and both—the choice of becoming an entrepreneur and consequent entrepreneurial success. In addition, a positive correlation was found between entrepreneurship education and entrepreneurial activity (Dickson et al. 2008).

Based on the discussion above, we have realized the importance of entrepreneurship education in the development of entrepreneurship in India. The Indian government had started many programmes to enhance entrepreneurship education, but due to limited experts, faculties and quality programmes, the task of entrepreneurial development remained unaccomplished. India ranks second in the world in terms of enrolment of students in higher education institutions (India higher education report 2012). Therefore, it is imperative to see how current programmes are affecting the intentions of potential entrepreneurs and how entrepreneurial intentions vary with educational levels.

## 2 Methodology

This is an exploratory study, and quantitative information was gathered using a survey method. As the aim of the paper is to explore the impact of entrepreneurship education on entrepreneurial intentions of potential entrepreneurs, information was collected from two different groups of students—one which had received entrepreneurial

education and training for 6 months and the other which was receiving general education. It is evident that the two groups are comparable based on their backgrounds. A Web-based questionnaire was administered containing single-item questions, measuring intentions and interest in entrepreneurship. Demographic information of students such as age, gender, family business, work experience, occupation, education and mentorship support required was also collected. Empirical results were arrived at using the independent *t*-test and descriptive statistics. Results are discussed and concluded in the light of literature.

## ***2.1 Sample Characteristics and Data Collection***

As mentioned above, the respondents were divided into two groups: Group 1 had respondents who received formal entrepreneurship education for 6 months. The objective of the programme was to “develop skills for managing and starting entrepreneurial ventures”. Participants included fresh and young graduates. Their educational qualifications were diverse: bachelor degrees in commerce, engineering, and arts; and diplomas and master’s degrees in business administration, science, technology, commerce, and arts. The mean of their age was approximately 24 years, and the number of participants was 83. Data for this group were collected from premier management and engineering colleges that incubated the 6-month training programme, “Management Skill Formation Programme for Entrepreneurial Venture”.

Group 2 comprised final year students of engineering and management who never received formal entrepreneurship education and training. As they were in the last semester of graduation, they are about to decide between a job and a venture creation. The mean of their age was approximately 25.56 years, and the number of participants was 81. Out of 81 students, 30 students were pursuing master’s and 28 were pursuing engineering. The data for this group were collected from premier management and engineering colleges.

## ***2.2 Variables of the Study***

In this paper, we first examine the impact of entrepreneurship education and training on the intentions of starting own enterprise in near future, and second, we assess the impact of educational levels on the intentions of becoming an entrepreneur. A single-item approach has been adopted in previous studies (e.g. Arenius and Minniti 2005a, b). Following the instructions of the previous studies, the questionnaire was developed using single-item questions, measuring the variables of the study using a five-point Likert scale (1 = low; 5 = very high).

### 3 Results

#### 3.1 Impact of Entrepreneurship Education and Training on Intentions of Starting Own Enterprise

Table 3 shows the descriptive group statistics of respondents. Group 1 is the receiver group which received 6-month entrepreneurial training, and there are 83 respondents in this group. Group 2 is then non-receiver group and has 81 respondents. They were asked about their intentions to start their own enterprise in the near future. Respondents from Group 1 expressed that they would start their venture in approximately one year (Mean = 1.8 years; SD = 2.189). Respondents from Group 2 expressed that they would start their venture in approximately four years (Mean = 4.47 years; SD = 4.843).

Table 4 shows the results of independent samples *t*-test. Levene’s test is significant at  $F = 19.684$  and  $p = 000$ , implying that unequal variances are assumed, yet the sample size of both groups is comparable. Thus, from Table 4, mean difference between the mean scores of Group 1 (Mean = 1.8; SD = 2.189) and Group 2 (Mean = 4.47; SD = 4.843) is found significant at  $t(110.781) = 4.525$ ;  $p = 0.000$ . Therefore, it is established from the data that entrepreneurship education

**Table 3** Group statistics for receiver and non-receiver of entrepreneurship education

Starting own enterprise	Entrepreneurship education and training	<i>N</i>	Mean	Std. deviation	Std. error mean
	Receiver	83	1.8	2.189	0.24
	Non-receiver	81	4.47	4.843	0.538

**Table 4** Independent samples test of receiver and non-receiver

Starting own enterprise	Levene’s test for equality of variances		<i>t</i> -test for equality of means						
	<i>F</i>	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference	
								Lower	Upper
Equal variances assumed	19.68	0	4.6	162	0	2.667	0.585	1.512	3.821
Equal variances not assumed			4.5	110.8	0	2.667	0.589	1.499	3.834



and training impact entrepreneurial intentions of potential entrepreneurs. Positive  $t$ -value implies that entrepreneurship education has developed and enhanced the intentions of starting own enterprise.

### 3.2 Impact of Educational Level on Becoming an Entrepreneur

Table 5 shows the descriptive group statistics of respondents. Seventy-six respondents are bachelors students pursuing engineering and 88 respondents are master's students pursuing business administration. It seems that master's students (Mean = 3.91, SD = 4.824) are keener to become entrepreneurs than bachelors (Mean = 2.20, SD = 2.358).

Table 6 shows the results of independent samples  $t$ -test. Levene's test is significant at  $F = 15.533$  and  $p = 000$ , implying that unequal variances are assumed, yet the sample size of both groups is comparable. Thus, from Table 6, mean difference between the mean scores of bachelors (Mean = 2.20, SD = 2.358) and master's (Mean = 3.91, SD = 4.824) is found significant at  $t(130.228) = -2.815$ ;  $p = 0.004$ . Therefore, it is established from the data that educational level affects intentions of becoming an entrepreneur. Negative  $t$ -value implies that with an increase in educational level, interest in becoming an entrepreneur reduces.

## 4 Discussion

This study offers several insights into entrepreneurship research: first, our findings contribute to entrepreneurship education-related research by showing that entrepreneurship education has a positive impact on entrepreneurial intentions and potential entrepreneurs intend to create a venture immediately after the completion of formal training. Prior studies have explored the impact of entrepreneurship education in conjunction with assessment and evaluation of the programmes (Duval-Couetil 2013), sustainable development (Lourenço et al. 2013a, b), propensity and intentionality of students (Pittaway and Cope 2007), skills development, etc. These studies were conducted in context of developed countries, and there has been limited understanding on the impact of entrepreneurship education on entrepreneurial intentions in context of developing Asian countries.

**Table 5** Group statistics for educational level

Interest in becoming entrepreneur	Education level	$N$	Mean	Std. deviation	Std. error mean
	Bachelors	76	2.2	2.358	0.27
	Masters	88	3.91	4.824	0.514

**Table 6** Independent samples test for educational level

Starting own enterprise	Levene's test for equality of variances		t-test for equality of means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference	
								Lower	Upper
Equal variances assumed	15.53	0	-2.8	162	0.005	-1.71	0.61	-2.91	-0.51
Equal variances not assumed			-2.9	130.23	0.004	-1.71	0.58	-2.86	-0.56
Equal variances assumed	15.533	0.000	-2.815	162	0.005	-1.711	0.608	-2.912	-0.511
Equal variances not assumed			-2.945	130.228	0.004	-1.711	0.581	-2.861	-0.562

Second, our study reveals that level of education is negatively associated with intentions of becoming an entrepreneur unlike found by Dickson et al. (2008). This finding emphasizes the importance of including entrepreneurship education, which has been missing in India, specifically at an early stage of students (Mitra and Manimala 2008). The finding is attributed to the fact that having a job is a lucrative option for those who are engaged in higher education. It has been mentioned above that India ranks second in the world in terms of enrolment of students in higher education institutions (India higher education report 2012).

Third, by integrating all the findings of this study, we found that general education has a negative impact and entrepreneurship education has a positive impact on intentions towards entrepreneurship. Findings further reveal that short-term entrepreneurship education programmes are more instrumental than degree courses as entrepreneurs have limited time to invest in long-duration education programmes (Mitra and Mathew 2008). Moreover, these entrepreneurship educational programmes are not engaged in the creation of venture and do not guarantee success of the same.

## 5 Conclusion

Fear of failure of enterprise, risk and status of entrepreneurs in society are still a concern for the Indian economy. Morrison (2006) demonstrated that entrepreneurship is embedded in cultural and industry settings and so are entrepreneurial intentions. Present study shows that those individuals who received formal entrepreneurship training were keener to start their own venture as early as possible. Entrepreneurship education helps in increasing entrepreneurial status in society. Nafziger (1971) noted that entrepreneurs prefer not to be restricted by culture and societal causes such as caste. Education is considered a link between entrepreneurship and potential entrepreneurs but the level of education is limited by cultural and societal environments and government policies. What is to be taught is now known but the pedagogy and implementation are still a challenge in India. Entrepreneurship education needs to be provided in order to get a holistic view of entrepreneurship, especially at an early stage of schooling. However, short-term entrepreneurship-based courses are preferred; the problem of gap between theory and practicality of entrepreneurship is persistent as Bechard and Gregoire (2002) found that a number of theoretically relevant issues remain unaddressed in entrepreneurship education. Therefore, a proper system and design are required to cater to such issues in a holistic manner.

### 5.1 Implications

This study suggests policy makers to add venture creation as the objective of entrepreneurship development programmes, followed by help and training in fund

creation, unlikely venture creation as the outcome of EDP's objective. In India, the quality of entrepreneurial education needs to be checked before implementing EDP so that it may not impact entrepreneurial intentions negatively. The findings can be used to formulate curriculum for entrepreneurship courses and can be applied to understand entrepreneurship programmes.

## 5.2 Future Scope

As we argued that entrepreneurship education helps in developing entrepreneurial intentions immediately while general education may have an impact on entrepreneurial intentions in the long run, we support this argument theoretically by noticing that most of the successful entrepreneurs, belonged to large high technology and innovative companies, are alumni of premier colleges (e.g. Indian Institutes of Technology and Management). Following the same argument, we suggest that entrepreneurial intentions may be explored in conjunction with levels of general education, but for the long run. In addition, there is a huge scope to explore entrepreneurial intentions at school level so that students may be categorized as least to most entrepreneurial which may further help them in creating awareness about selection in entrepreneurship and non-entrepreneurship career.

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## Chapter 17

# “Orchids in the Wild”: An Investigation into Entrepreneurial Education Effectiveness and Empowerment among Women’s SHGs

Sheena and G. Naresh

**Abstract** The issues of women, empowerment, entrepreneurship and education have been a topic of discussion in various international forums, thus making it significant in the present-day scenario. The study was conducted in the SHGs located near tourist areas of Kerala by exploring the role of women entrepreneurship in tourism industry and taking the women SHGs functioning under Kudumbashree project in selected districts of Kerala, the role of SHGs in tourism entrepreneurship education and to find out the effectiveness it has on the various levels of empowerment of women. Random sampling technique was employed to select SHGs, and survey was conducted for data collection. Structural equation modelling (SEM) was used to measure the impact of the variables on the outcome and the findings of the study show that the education/training imparted to the SHG members has empowered them to a great extent and among the four levels of empowerment, viz. psychological, economic, social and political empowerment, the two latter variables positively influence entrepreneurial skills. This implies a positive transition of women from a conventional society to individuals who can take up demanding challenges.

**Keywords** Entrepreneurship education · Self-help groups · Tourism entrepreneurship · Women empowerment

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## 1 Introduction

Women are always termed as being “vulnerable” and “powerless” in our society even today. Why should women be empowered? It seems ludicrous to pose such a question in the modern-day world but issues relating to women and their empowerment have been a topic of discussion in various international forums and the United Nation’s Millennium Development Goal (MDG); five out of the eight targets are related to women empowerment. It, thus, becomes important to find out and analyse the various approaches of development for women. There are a number of avenues such as the manufacturing industry, business and others from where foreign investments can be attracted. No doubt, the tourism industry has and remains to be a pivotal focus of development especially in the developing countries. This is largely seen in those countries which seek foreign exchange earnings. Tourism can also help poor women smash the cycle of poverty through formal and informal employment, entrepreneurship, training and community development. However, it holds true that all women do not benefit equally from tourism development because of poor education and lack of other resources. While in some regions, tourism encourages women empowerment, in others, tourism negatively affects the lives of women and propagates various social and economic issues. Tourism is considered to be an industry that has the potential to create many job opportunities. It is a tool to empower women from various aspects such as assisting women to increase power and control over natural resources, economic empowerment, social empowerment and political empowerment. It is one of the economic sectors in which great degree of entrepreneurial support is needed. The tourism industry is considered to be an industry that has the potential to create many small businesses and therefore to contribute job creation, and women involvement in tourism will bring many positive impacts of promoting economic as well as social empowerment.

Entrepreneurship is directly related to better access to microcredits, but the real problem of women is poverty and having less access to the credit facility. Many rural economies have historical, cultural, natural and recreational assets that can be used in developing the local tourism industry as part of economic development strategy. In fact, the relationship between entrepreneurship and tourism can be an important indicator of a healthy rural economic development. This is where the need for providing entrepreneurial education and training steps in. The far-sighted vision of the Global Report on Women in Tourism (2010) talks about promoting women empowerment and upholding their rights through a vocation in tourism. The Report speaks about five goals: promotion of equal opportunities for women in the field of tourism; increased women entrepreneurship in tourism; providing training and education to women; encouraging women to take up initiatives in tourism; to provide protection to women who work in home-based tourism enterprises.

It is only right in this context to mention the importance of entrepreneurship education and its positive effects on women entrepreneurs. Entrepreneurship education denotes the various curricula that encourage entrepreneurship awareness and insights towards livelihood purposes and the provision of training for acquisition of

skills for the purpose of enterprise creation and development (Vesper 1990). It inspires minds to do all the right things and understand the significance of the training programmes imparted to them and thus lead an enterprise in the right way, thus building a strong relationship between entrepreneurship education and empowerment. Empowerment through education helps people to tackle obstacles, be it social, economic, political or psychological that may prevent them from reaching their potentials. The need for empowerment arises when an individual finds it difficult to actualize their dreams and aspirations due to barriers that are created by others within the same society (Olakulein and Ojo 2006).

## 2 Review of Literature

The research investigates the effectiveness of entrepreneurship education on women empowerment. The study is investigated on the basis of two approaches. Firstly, the concept of entrepreneurship education is measured in terms of the awareness programmes, training programmes and various other programmes initiated by the government-run project, Kudumbashree, in Kerala. The second approach relates to the set of studies relating to the determinants of women empowerment.

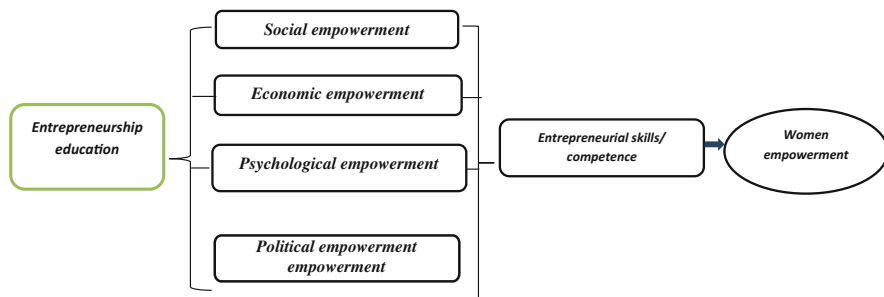
Entrepreneurship has been defined in numerous ways. It may be seen as a rejoinder to the varied openings and capabilities that exist within a person and his surroundings. It also refers to an ingenious and pioneering answer in socio-economic endeavours, and it involves the establishment of business enterprises through enthusiasm and capability of an individual to reconnoitre investment opportunities and run it efficaciously, thus making profits or losses from invested capital. The World Bank (2012) says that education is central to the creation of a knowledge economy worldwide. It is only through education that wisdom and abilities are transmitted to people and their skills and abilities are developed. Thus, entrepreneurship education has been given eminent standing all over the world. Entrepreneurship education represents the various programmes that encourage entrepreneurship awareness and insights towards livelihood purposes and the provision of training for acquisition of skills for the purpose of enterprise creation and development (Vesper 1990). Education prepares for new project commencement by conveying information and eventually developing pertinent capabilities that increase the self-efficiency of the budding entrepreneur (Gomen et al. 1997).

The term “empowerment” has not been clearly defined as different authors express the concept in the context of the situation or their professional experience (Sofield 2003). Broadly stating, empowerment is a process by which individuals and communities gain mastery over their own lives in areas where empowerment is possible given a range of niches and prospects (Rappaport 1984; Sofield 2003). Women empowerment refers to the ability of women to transform economic and social development when empowered to fully participate in the decisions that affect their lives through leadership training, coaching, consulting and the provision of enabling tools for women to lead within their communities, regions and countries



(Wiser Earth 2005). Empowerment helps people reach their fullest potential, to enhance their social and political participation and to believe in their own skills (Kandpal et al. 2012). Nevertheless, women are said to be empowered when they enjoy the initiative to make decisions on their own as compared to the husband's ability to make decisions. Kandpal et al. (2012) have put forth in their research that the community-level programme called the Mahila Samkhya that was implemented in the northern states of India aims to empower women through the process of education and information dissemination, thus making women empowered in three levels namely access to outside employment, physical mobility and political participation. As the concept of empowerment cannot be explicitly measured, economists suggest that four variables, viz. social, economic, political and psychological empowerment are positively correlated with women empowerment.

The theoretical/conceptual framework of the study puts forth several key concepts and issues—entrepreneurship education through training and various other awareness programmes. Empowerment of women on the four domains, viz. social, psychological, political and economic empowerment and improvement in entrepreneurial skills and competence is necessary. Economic empowerment is assessed by opportunities of employment both in formal and informal sector, extent of income generation, extent of savings, access to credit, control over credit and risk taking (Scheyvens 2000; Anderson and Baland 2002; Hashemi et al. 1996). Moreover, economic empowerment involves sharing of cash earned among the households and ownership of assets (Agarwal 2002). When a community's sense of cohesion and dignity is strong as a result of an activity in which an empowered community has strong community groups and vibrant participation, such a situation is called social empowerment. Scheyvens (2000) states that social empowerment relies on level of awareness, perceptions on tourism entrepreneurship, recognition in family, mobility, participation in decision-making, self-confidence, communication skill and the capacity to respond. Also, Anderson and Eswaran (2009) found that in Bangladesh-based study on women that when employed outside has a higher level of household bargaining power. Empowerment in the psychological sense means independence in decision-making, strong status perceptions in family decision-making, gaining of knowledge and skills, improved self-esteem, self-perception of social status and faith in the ability of its residents (Scheyvens 2000). A community is said to be politically empowered when the members have the freedom of thought and decision-making, have control over initiatives, participation in the project cycle (Scheyvens 2000). It also includes the participation of the community members in the project right from its feasibility study to its final implementation, the suggestions of its members to be heard and the role of bureaucrats' and NGOs role in power decentralization (Scheyvens 2000). Anderson and Eswaran (2009), Hashemi et al. (1996) and Rahman and Rao (2004) have also in their studies noted the importance of political participation among women which led to their empowerment. Entrepreneurial skills that include skills/creativity of the SHG members in performing various tasks, the various promotional strategies implemented by the members in boosting their business in tourism areas and the



**Fig. 1** Conceptual model of levels of women empowerment attained as a result of entrepreneurship education

challenges faced by them in tourism entrepreneurship form the final variable (political participation) taken for the research.

There is little literature that links women empowerment in tourism and entrepreneurship. According to Ateljevic and Peeters (2009), the nexus between women empowerment, entrepreneurship and tourism is a social innovation. Scheyvens (1999) has designed the framework of entrepreneurship to investigate the influence of ecotourism initiatives on local communities from four levels of empowerment, viz. economic, psychological, social and political empowerment. As the tourism sector is a bankable sector in the Indian scenario, the women SHGs and their entrepreneurship initiatives in the tourism sector have been taken for the study. A conceptual model showcasing the factors that result in women empowerment in tourism industry as a result of entrepreneurship education has been given below in Fig. 1. The study outlines various factors such as social empowerment, economic empowerment, psychological empowerment and political empowerment as a result of entrepreneurship education that leads to enhanced entrepreneurial skills and competence.

### 2.1 Kudumbashree Project of Kerala

The project was first launched by the Government of Kerala in 1998 to expunge out absolute poverty from the state through concerted community action under the leadership of local self-governments. This endeavour came to be known as the “Kudumbashree”, and it is today the largest women-empowerment project in the country. The programme has more than 37 lakh members and covers more than 50% of the households in the state of Kerala.

The project revolves around three significant components—microcredit, entrepreneurship and empowerment. The Kudumbashree initiative has today a success story of addressing the basic needs of the less privileged women—thus promising and providing them a more decorous life and an improved future. Kudumbashree is different from other conventional programmes in such a way that it looks upon poverty not just as the lack of money, but also as the deprivation of

basic rights. It has become the need of the hour for the poor, as they need to assemble to claim these rights collectively. The project identified the poor who were organized under a well-networked community-based organization (CBO). This methodology has been incorporated into the policy framework of the state for identification of the poor. The Kudumbashree also has under its wing the neighbourhood groups, area development society, community development society and various other committees for their effective functioning. The members of the various SHGs involved in various income generating activities such as running catering units, hotels, handicraft units, manufacture of Ayurvedic medicines, tailoring units, tiny manufacturing units of coir mats, Vana Samrakshana Samiti (VSS) and cattle rearing. They are also involved in various kinds of microfinance activities such as promotion of thrift and credit, linkage banking and Bhavanshree. The microenterprises of Kudumbashree include the National Rural Employment Generation Scheme (NREGS), The Rural Micro Enterprises (RME) and Yuvashree.

Economic empowerment of people has become essential in the society. It is seen that even though there is enhancement in the status of women in education, employment and society, there is also an enormous increase in crime and sexual harassment against women. Today, education plays a leading role in empowering all segments of the society, especially women. SHG groups like Kudumbashree should be brought to the mainstream in all quarters of the country where women may become forerunners, fight for their rights and enjoy a better living.

### 3 Problem Discussion

Tourism is widely acclaimed as an important global industry offering immense employment opportunities, both direct and indirect. Tourism becomes more relevant in the current economic context of the southern regions of India where agriculture and manufacturing industries are facing serious threats in terms of profitability. Women entrepreneurs constitute a negligible portion of the total number of entrepreneurs. This state of affairs is mainly due to social, psychological and economic barriers. Due to the break-up of the joint family system and the need for additional income to maintain living standards in the face of inflation, it has become the need of the hour for womenfolk to become entrepreneurs. There is extant literature regarding women empowerment and tourism entrepreneurship, one being the research by Ateljevic and Peeters (2009) that explains the relationship among women empowerment, entrepreneurship and tourism emphasizing the concept of social innovation. The concept of women empowerment and entrepreneurship in relation to finding answers to issues of social innovation and community development is highlighted.

A major concern for the state of Kerala is the inconsistency developed in the job prospects in the Middle East countries which had been a major revenue maker for the state. In the context of these developments, tourism is of much economic importance to the state of Kerala (Joseph and Joseph 2005). There is a research gap in putting together various concepts, viz. women, entrepreneurship education, entrepreneurial

initiatives, empowerment and tourism. Also, links between tourism and social entrepreneurship and women empowerment through tourism have not been researched widely. All this has made it imperative to think about other innovative ways of income generating activities for the women members of the SHGs and microenterprises. The tourism industry has a strong potentiality with the entrepreneurial development of people. These can be achieved by streamlining the efforts of the women SHG members by providing various capacity building programmes so that they can undertake the administration and management of tourist facilities. Thus, the study investigates the various support systems and incentives in the form of education programmes through training and awareness programmes received by the women SHG members for entrepreneurial initiatives in the tourism industry. The research also delves into the problems and challenges faced by them to thrive in the industry.

## 4 Methodology

This study has been initiated to examine the various issues of development in tourism with thrust on women empowerment through entrepreneurship education. The idea behind this paper is to see the effect of social, economic, psychological and political empowerment on the entrepreneurial skills of the SHG members of Kudumbashree units of Kerala. The theory behind this is that one will be a successful entrepreneur if they are empowered with all the above-mentioned criteria which become possible through entrepreneurship education. The specific objective of the study is to examine the positive sides of women empowerment through entrepreneurship education among SHG members in the tourism sector in the southern region of India, viz. Kerala within the broader context of social, economic, psychological and political environment. Also, the study aims to find out the effectiveness of entrepreneurship training/education programmes on the SHG members of Kudumbashree units through the level of empowerment achieved by them.

The method of the study is descriptive and exploratory in nature. The primary data have been collected through a structured interview schedule from the various districts of the state of Kerala. It was intended to assess the SHG initiatives of women entrepreneurs and their training/educational programmes in the various districts. The SHGs which come in the tourist-centred areas of the state were considered for the study. For identifying the various avenues of income generation activities of the SHG members and the district-wise number of members of each state, the Kudumbashree report of 2012 published by them has been used which has helped in finding out the sample size of the study. Also, primary data have also been relied upon in order to understand the attitudes and perceptions of the SHG women members towards the concept of entrepreneurship in tourism industry. Also, concepts of empowerment were assessed using these schedules. The population of the study consists of a finite number of SHG members of Kerala. The sample for the study consists of a defined target group of women SHG members of Kudumbashree project of Kerala.

According to the principles of multi-stage random sampling, in the first stage, the state of Kerala was divided into three regions, namely north, central and the southern regions. Since the SHGs promoted by the government disclose similarities in their functions, one district has been selected from each region of the state amounting to three districts in total as the sample. Those districts which have the highest number of SHGs and tourism centres in the state had been selected from each region. Therefore, the districts of Trivandrum (southern region), Thrissur (central region) and Wayanad (northern region) from the state of Kerala had been selected.

In the second stage, the sample size of the SHG women members of the three districts was determined. The population of the women SHG members of the Kudumbashree project of the three districts in Kerala came to 39, 408. A pilot study on a trial sample of 100 SHG members from Kerala were conducted for the purpose of validating the interview schedule.

As per the principles of sampling, the sample size has been rounded off to 400 SHG women members from the state of Kerala which was considered suitable for the study. The 400 women members will be divided among the three regions of the state, i.e. 133 from Wayanad, 133 from Thrissur and 134 from Trivandrum, respectively. Those SHGs which come under the panchayats of the tourist centres shall be selected for the study. Since all the Kudumbashree units are similar in their nature and functions, an equal number of 25 SHGs are selected from each district. Lakhs of women are beneficiaries of the Kudumbashree system, and out of the sample size in each district, 5–6 members shall be interviewed from each SHG.

The variables selected for the study have been drawn heavily from the literature, and a conceptual framework of the various levels of empowerment has been designed that leads to social entrepreneurial competence in tourism finally leading to women empowerment. The variables identified for the study include social empowerment, economic empowerment, psychological empowerment, political empowerment, entrepreneurial skills and the organization and tourism-related support from authorities that lead to women empowerment in tourism industry. The social empowerment (Scheyvens 2000) depends on the level of awareness, perceptions on tourism entrepreneurship, recognition in family, mobility, and participation in decision-making, self-confidence, communication skill and capacity to respond. Economic empowerment (Scheyvens 2000; Anderson and Baland 2002; Hashemi et al. 1996) is derived from gaining more opportunities of employment, extent of income generation, extent of savings, access to credit, control over credit and the extent of risk taking. Another variable considered suitable for the study is psychological empowerment (Scheyvens 2000) where the members enjoy freedom in decision-making, have high-status perceptions and gaining of professional knowledge and skills. When the members of the organization have the freedom of thought and decision-making, they have control over initiatives and they can participate in every stage of the project cycle, they are said to be politically empowered (Scheyvens 2000; Anderson and Eswaran 2009; Hashemi et al. 1996; Rahman and Rao 2004).

The reliability test was run to find out the reliability and consistency of each variable decided in the schedule. The Cronbach's alpha value was 0.812 as shown in Table 1. Also, for testing the validity of the questionnaire, item analysis was carried out and enclosed in the Annexure, Table 3.

**Table 1** Reliability statistics (primary data)

Cronbach's alpha	Cronbach's alpha based on standardized items	No of items
0.800	0.812	62

All the data were tested for stationarity and the non-stationary variables that were made stationary before running the analysis. The data have been analysed in detail using structural equation modelling tools to identify the extent of empowerment of women who undertake tourism entrepreneurship through SHGs and the degree of impact of each level of empowerment that contribute towards women entrepreneurship effectiveness. The SEM is a multiple equation regression model and also a significant multivariate analysis technique that represents causal, simultaneous relationships and interdependence among the observed and unobserved variables of the structural equations. In contrast with a conventional multivariate linear model, the response variable in one regression equation may look as an explanatory variable in another equation of SEM. Furthermore in a SEM, variables can influence each other reciprocally, either directly or through other variables as intermediaries (Fox 2006).

## 5 Result and Discussion

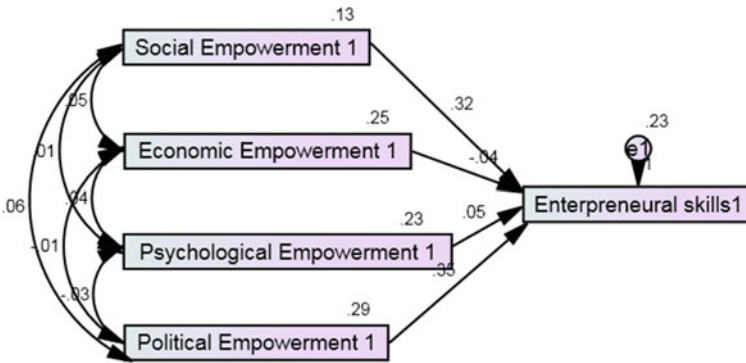
The study intends to analyse the effectiveness of entrepreneurship education and training on the women SHG members of Kudumbashree units of Kerala. The thought behind this paper is to see the effect of social, economic, psychological and political empowerment on the entrepreneurial skills of the women SHG members of the many Kudumbashree units of the various districts in Kerala. The hypothesis behind this reflection is that an entrepreneur, if they are empowered with all the above-mentioned criteria, will become successful in their respective ventures.

From Table 2, the  $\chi^2$  value and its significance exhibit the model fitting the data and the  $\chi^2$  value should be significant at 5% for absorbed variables of sample size of >250 (Barrett 2007; Hair et al. 2009). From the above results, it can be identified that the significance value for the model tested is 0.000 for a df of 3 which is highly significant, indicating that the model fits the data well. Root-mean-square error of approximation (RMSEA) is the next goodness of fit indices, which should be less than 0.05 (Hair et al. 2009), and the value for the model is 0.000; from this, it can be

**Table 2** Model fit

Chi	df	Sig.	RMSEA	NFI	CFI	RFI	AIC	CAIC
19.235	3	0.000	0.000	1.000	1.000	0.918	30.000 <sup>a</sup>	104.909 <sup>a</sup>

<sup>a</sup>Default model and lowest of the three models



**Fig. 2** Entrepreneurship education effectiveness on four levels of empowerment leading to enhanced entrepreneurial skills (primary data)

concluded that the model exactly fits the data. The other Goodness of Fit indices were Normed Fit Index (NFI), Comparative Fit Index (CFI) and Relative Fit Index (RFI) whose values should be greater than 0.90. The values obtained from the model were 1.000, 1.000 and 0.918. It can, thus, be concluded that the model fits the data very well. Akaike information criterion (AIC) and the consistent version of AIC (CAIC) should be least for the model tested (Akaike 1974; Diamantopoulos and Siguaw 2000), and it is the least for the above model. From the results, it is evident that the model fits the data well.

The entrepreneurial skills which are attained through entrepreneurial education and training programmes are explained by the social, economic, psychological and political empowerment by 23%. Figure 2 clearly states that social empowerment and political empowerment positively influence the entrepreneurial skills or vice versa at 5% level of significance. Social empowerment is defined by factors such as level of awareness, perceptions on tourism entrepreneurship, recognition in family, mobility, and participation in decision-making, self-confidence, communication skill and capacity to respond. The SHG members clearly had positive perceptions towards tourism entrepreneurship as they see the rising number of tourists into the various tourist areas and thus contemplate further governmental support for tourism initiatives. Also, family recognition has encouraged them to commence various endeavours and thus has empowered them. This has in turn given them more courage to move about for fulfilling their professional needs all by themselves and to participate in decision-making in the family and outside. Also, these initiatives have improved their level of confidence and their capacity of respond. The other variable that has positively influenced entrepreneurial skills and competence in tourism is political empowerment. Once the members have gained freedom of thought and decision-making, they gain confidence in controlling initiatives and

they believe that their voices would be heard at every stage of the project cycle of their business, that is right from the point of feasibility till the point of implementation. Also, they feel empowered to control and monitor the SHG initiatives which include opportunities for the members' views to be aired and heard and thus leading to decentralization of power (Scheyvens 2001).

## 6 Conclusion and Future Directions of Research

The national development of a country, be it from the socio-economic or political context, can be achieved only if the needs and aspirations of all realms of the society are achieved. This also involves the addressing and solving of various issues at every level of the nation's economy including the empowerment of women. Women empowerment may be seen as a process where they challenge the existing norms and rules and culture, to improve their personality, their family and societal status and freedom in decision-making. Entrepreneurship education inspires minds to do all the right things and understand the significance of the training programmes imparted to them and thus lead an enterprise in the right way. In view of this, the study basically deals with the investigation into the effectiveness of entrepreneurship training and education programmes on various SHG members of the government-run Kudumbashree units of Kerala. In addition, the study also delves into an analysis into the four levels of empowerment among women to find out the impact of these on the development of entrepreneurial competence in tourism. The results of the study indicate that among the four, social empowerment and political empowerment have a higher impact on the development of entrepreneurial creativity/skills among the women SHG members than the others (Kandpal et al. 2012). This is because of the freedom they enjoy in making decisions regarding business activities and the privilege they benefit from controlling initiatives and so on.

As a future direction to research, it is felt that the same methodology may be extended to other states where the government has initiated such activities among women members. Also, the focus of the government towards tourism may also be investigated wherein the SHG members can generate income through tourism entrepreneurship. Another direction to further research may be a cross-regional study on the empowerment levels of members of these government-supported groups. This will help in understanding the level of economic social, psychological and political empowerment among women of the Indian society across different regions of the same state. It is felt that these can provide startling new insights for the government and NGOs and thus help in making strategic changes to the concept of tourism entrepreneurship and women empowerment.



## Appendices

See Table 3.

**Table 3** Item statistics

	Mean	Std. deviation	N
Trsm_postive_impact	3.47	1.259	401
Edu_health	3.89	0.867	401
Welfare	3.57	1.123	401
Women_commission	3.75	0.860	401
Existing_laws	3.74	0.768	401
Consid_work	3.96	0.675	401
Recogn_society	3.85	0.808	401
Gender_role	3.84	0.646	401
Decision_influence	3.97	0.580	401
Work_in_family	3.86	0.574	401
Role_in_family	3.88	0.528	401
Income_wealth	3.83	0.550	401
Freedom_to_move	3.81	0.646	401
Travel_night	3.73	0.714	401
Travel_alone	3.78	0.552	401
Travel_places	3.72	0.730	401
Attend_meetings	3.89	0.616	401
Purchase_land	3.73	0.643	401
Tv_furniture	3.82	0.575	401
Purchase_household	3.84	0.533	401
Planning_budget	3.76	0.560	401
Children_edu	3.86	0.489	401
Number_children	3.76	0.571	401
Children_marriage	3.81	0.522	401
Common_matters	3.89	0.529	401
Do_whatever	3.91	0.660	401
SHG_self_sustainability	3.87	0.634	401
Take_decisions	3.79	0.569	401
Work_for_family	3.94	0.660	401
Present_before_offcr	3.96	0.551	401
Before_audience	3.93	0.589	401
Group_discussions	3.87	0.683	401
Social_evil	4.12	0.584	401
Against_dowry	3.94	0.431	401
Community_cohesion	3.95	0.487	401
Negative_impacts	3.95	0.539	401

(continued)

**Table 3** (continued)

	Mean	Std. deviation	N
Increased_income	4.08	0.677	401
Consump_reqmnts	4.23	0.604	401
Employment_oppo	4.03	0.615	401
Savings_increased	4.07	0.509	401
Saving_habits	4.12	0.530	401
Freedom_borrowing	4.12	0.601	401
Borrow_frm_frnds	4.00	0.604	401
Personal_needs	3.92	0.493	401
Use_of_funds	4.03	0.417	401
Mentally_strong	3.97	0.535	401
Decision_home	3.88	0.536	401
Respect_community	3.87	0.626	401
Gain_knowledge	3.85	0.539	401
Decision_makng_powr	3.77	0.678	401
Suggestions	3.87	0.804	401
Openion_in_org	3.87	0.782	401
Org_str_dec	3.77	0.764	401
Other_grps	3.75	0.762	401
innovation_skill	3.66	0.824	401
Entrepreneurial_opportunities	3.66	0.830	401
Marketing_skill	3.53	0.840	401
Dec_making_ability	3.60	0.745	401
Business_risk	3.46	0.866	401
Manage_finance	3.54	0.824	401
Change_situation	3.58	0.843	401
Challengeable_employ	3.46	0.827	401

Table 4: Schedule

Schedule for women SHG members

Topic of interview/schedule: “orchids in the wild”: an investigation into entrepreneurial education effectiveness and empowerment among women SHGs

#### I. Organization and tourism-related information and structure of the SHG

##### (A) General information

1. Name
2. Name and address of the group:
3. Location:
4. Education
5. Occupation:
6. Marital status:
7. Nature of house you reside:

## (B) Information about the organization

1. Type of the SHG
2. Mission/objectives of the SHG
3. Projects in the field of tourism
4. Decision-making process
5. How are women involved in tourism projects?
6. Criteria needed to meet to be involved in the SHG

## (C) Background/set up initiative

1. Reasons for starting the SHG related to tourism
2. Why tourism?
3. Why women?
4. Importance of this project to be set in this particular location

## (D) Present situation

1. Present situation of the business
2. Support from government (financial/technical, credit support)
3. Success factors of the organization
4. Weaknesses/threats faced by the organization
5. Arrangement of surplus
6. Any significant change in the mission of the organization? If yes, Why?

## (E) Family background of members:

1. Are you getting active support from your family members for working in this group?  
(Yes/No)
2. Do you find difficulties in doing household as well as group work?  
(Yes/No)
3. Source of information about SHG  
(Friends, neighbours, NGO)
4. What motivates you to join the group?
  - To enjoy joint work
  - Due to the pressure of family
  - To make own savings
  - To get loan
  - To relieve from moneylenders
5. Your position in the group  
(leader/member)

## (F) Technical details

1. Monthly income
2. Annual savings
3. Loan taken

4. Purpose for which loan is used
5. Monthly savings of the group
6. Do you get sufficient loan from the group? (Yes/No)
7. Opinion about rate of interest charged by SHG (high, low, reasonable)
8. Does the membership help you to escape from moneylenders? (fully, partial, not at all)
9. Do you have a bank account? (Yes/No)
10. Do you have any property in your name? (Yes/No)
11. Is it acquired after joining the group? (Yes/No)
12. Have you participated in any training programmes? (Yes/No)
13. Nature of training programmes attended (awareness, leadership, EDP, accounts and auditing)
14. Do you have confidence to start an enterprise by yourself/with the help of others? (Yes/No)
15. Is your group doing any income generation activities? (Yes/No)  
If yes, (garment unit, bakery, hotel, agro based, any other)  
If yes, monthly income derived from it?
16. In your opinion, what are the problems likely to arise in connection with the establishment and functioning of an enterprise?  
Financial  
Marketing  
Planning and organizing  
Inappropriate training  
Lack of knowledge and skill  
As a woman

(G) Statements show the improvement in status and position of women after joining the group

- (i) What do you mean by empowerment? (in your own words) examples of empowerment through tourism in your area ....

*Social Empowerment*

Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
<i>(A) Awareness</i>					
Development of tourism has a positive impact on women entrepreneurship					
Knowledge about education, health and environmental matters					
Knowledge about welfare measures for women and children					

(continued)

(continued)

Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
Knowledge about women's commission and their importance					
Knowledge about the existing laws for the protection of women from abuses					
<i>(B) Recognition in family</i>					
Can get a consideration for the work done in family					
Wider recognition and appreciation in society					
Reconsideration of gender role stereotypes					
Can influence the decisions of others					
Less burden of work in family					
Nature of the role and responsibilities in the family engaged					
Income and wealth inequalities have greatly reduced					
<i>(C) Mobility</i>					
Increased the freedom to move about within village/town					
Can travel alone at night					
Can travel alone to relatives houses, banks, hospitals					
Can travel to any places needed					
Can attend meetings					
<i>(D) Participation in decision-making in and outside family</i>					
Participate in taking decisions while purchasing land/house					
Participate in taking decisions while purchasing TV, furniture, etc.					
Participate in taking decisions while purchasing other household items					
Participate in taking decisions while planning family budget					
Participate in taking decision regarding education of children					
Participate in deciding the number of children					
Participate in deciding the marriage of children					
Participate in taking decisions in other common matters					

(continued)

(continued)

Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
<i>(E) Self-confidence</i>					
I can do whatever I wish					
SHGs provides self-empowerment and self-sustainability to its members					
I can take my own decisions					
I can work for myself and family					
<i>(F) Communication skills</i>					
Able to present before an officer any problem					
Able to explain any opinion before any audience					
Actively participate in group discussions					
<i>(G) Capacity to respond</i>					
Able to react against any social evil existing against women					
Able to fight against dowry system or any other injustice					
Community cohesion and spirit have greatly enhanced					
Incidences of negative impacts associated with tourism such as crime and prostitution ... have reduced					

*Economic Empowerment*

Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
<i>(A) Increase in income</i>					
Level of income increased due to tourism entrepreneurship					
Can satisfy consumption requirements					
Tourism industry provides employment opportunities to women entrepreneurs					
<i>(B) Increase in savings</i>					
Level of savings has increased					
Saving habits increased					
<i>(C) Access to credit</i>					
I have the freedom to borrow from the group					

(continued)

(continued)

Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
I can borrow from friends/relatives					
<i>(D) Control over credit</i>					
I have the freedom to use the funds for meeting personal needs					
I have a role in deciding the use of funds					

*Psychological Empowerment*

Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
I feel mentally and emotionally strong after involving in tourism projects					
I make decisions myself at home					
I earn respect and pride from my community					
I have gained knowledge after being involved in tourism projects					
I have a decision-making power in the organization					

*Political Empowerment*

Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
I am actively involved in providing suggestions and opinions in the operation of the project					
My opinions and needs are heard by the organization					
The organization structure facilitates decision-making power among us					
I am involved in other groups of society such as federations/associations/societies					

*Entrepreneurial Skills*

Statement	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
Possess innovation skill/creativity after joining tourism projects					
Entrepreneurial opportunities are high in tourism industry					
Possess the skill to market the products					
Possess decision-making ability at the apt time					
Can face business risks					
I can effectively manage the finance					
I can effectively manage the changing situation					
Tourism-related employment is challengeable for women entrepreneur					

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# Chapter 18

## Entrepreneurship Development in Business Schools: An Analysis of the Initiatives in Delhi and NCR

Sushmita Biswal Waraich and Ajay Chaturvedi

**Abstract** Today's economic environment calls for the development of entrepreneurs, to give a boost to employment as well as the economy. In order to develop entrepreneurs, it is critical that there is a base of young and energetic graduates endowed with a drive to create wealth and new ideas. Such individuals will need to be encouraged to develop their business ideas through a gestation process and be realised as viable business entities. While the government policies may play a role in facilitating entrepreneurship, the major responsibility needs to be shouldered by the educational institutions involved in tertiary education, in general, and business schools in particular. The objective of the study is to make a comparative analysis (qualitative) of the efforts made by the B-Schools, with a focus on those who have their own entrepreneurship cells, in the National Capital Region (NCR) of India, towards entrepreneurship education. Based on the analysis and findings of the study, a model has been evolved to enhance the effectiveness of delivery of entrepreneurship education.

**Keywords** Business schools • Entrepreneurship • Venture creation

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## 1 Introduction

The time has come now when educational institutions need to contribute their bit towards developing entrepreneurs in the society through the change of gear in the context of entrepreneurship education delivery. While business schools have a responsibility for grooming the future managers, they should also own up the responsibility for stimulating young minds towards venture creation. Being already in a position to equip the students with an all-round business knowledge which includes human resources, marketing, finance and operations, it does not look like an uphill task. With all this business knowledge, some more efforts could do wonders in producing more entrepreneurs. Entrepreneurship education needs radical upgrade in terms of its scope and scale as well as in terms of a special status in itself. This is where educational institutions play an important role to create an enabling ecosystem for the students, by stimulating an entrepreneurial mind set and attitude. Hence, this paper intends to explore the contribution of a few institutions, imparting management education, towards creating an entrepreneurial ecosystem.

## 2 Review of Literature

Today, entrepreneurship is widely accepted as a legitimate tool for economic growth resulting in acknowledgement of the need for entrepreneurship as a field of study in business courses (Arthur et al. 2012). It is important to acknowledge the distinction between entrepreneurship education and business management. While entrepreneurship education is all about starting a new company, business management pertains to managing the affairs of an ongoing enterprise (Zeithmal and Rice 1987). Management courses tend to focus on managing a business to expect normal sales, profit, and growth, while the entrepreneurship courses emphasise rapid growth and profits with the possibility for high profits and quick sale of the company (Winslow et al. 1999). Adding to this, Gibb (2005) has emphasised upon a thorough practical orientation to entrepreneurship education which focusses on learning “for” and “about” entrepreneurship education through entrepreneurship itself (i.e. by implementing it).

Dhliwayo (2008) highlighted the importance of the pedagogy of “learning by doing”, which has also been given due importance in premier institutes such as Stanford School of Business, MIT Sloan School of Management, The London Business School and the National University of Singapore Even at the top institutes in India that offer technical or management education with their popular support programs for student entrepreneurship (Mutsuddi 2012), the educational framework for inculcating the entrepreneurial spirits seems far from satisfactory (Dutta 2012). Thus, entrepreneurship education needs to be imparted to the students not only for their own employment but also for fuelling economic growth.

### 3 Entrepreneurship in the Indian Context

Post second five-year plan, the need was felt for a strong small-scale industry (SSI) to support the large-scale industries, both in backward and forward linkages. This led to designing of strategies to develop entrepreneurs through training intervention. However, even at this stage, entrepreneurship did not form a part of curricula in higher education. Only recently has higher education begun to be recognised as an instrument for promoting entrepreneurship. Presently, there is renewed interest in the area of entrepreneurship and it has attracted the attention of both the policy makers and the academicians (Kumar 2010).

During the 9th Plan period, vocational courses assumed emphasis with an element of entrepreneurship at the graduate level. Accordingly, a paper on entrepreneurship and its relevance in India was taught at the end of such programs, the idea being to enable graduate students take to entrepreneurship. This, however, had limited success as the basic objective of inculcating the spirit of enterprise poorly translated into entrepreneurial ventures. However, during the post-liberalisation period there has been a slight change in the above trend. It is observed that during the post-liberalisation period, a large number of people have chosen entrepreneurship to exploit the opportunities (Kumar 2010).

In the 1990s India, with liberalisation and the accompanying changes in social and cultural milieu saw the potential of entrepreneurship not only as a career option for employment generation but also as a means of wealth creation. This was boosted by success stories of entrepreneurs, especially in the IT sector which were looked upon as role models. With enormous benefits to the economy, entrepreneurship helps in avoidance of monopolies and cartels. It encourages competition with many new ventures acting as levellers against MNCs and offering a variety of choices to consumers. Government needs to realise that it is only by nurturing and promoting budding entrepreneurs through entrepreneurship friendly policies that the desired economic growth can be achieved (Rehman and Elahi 2012).

Recognising the importance of entrepreneurship in strengthening the economy of the country and in creating the much needed jobs, in the process, the current government, immediately on taking charge in May 2014, created a department within the Ministry of Youth Affairs and Sports to drive entrepreneurship and skill development. This department is headed by a minister of the rank of Minister of State (Independent Charge). National Skill Development Corporation too, which earlier was under MSME, has now been grouped under this department.

The latest *Make in India* promotion policy, coupled with the government's endeavour to make the starting of businesses easier, will prove to be a boon for the entrepreneurs. *Make in India* strategy is primarily aimed at attracting FDI, to convert India into a manufacturing hub of the world, with the attractions being the availability of skilled labour at a comparatively low cost, its relative political stability and the advantage of its geographic location which is in close proximity to the major markets of the future, i.e. South and SE Asia. While attempting to link this initiative with entrepreneurship, in the current paper, it is likely to prove to be advantageous to the entrepreneurs for the following reasons:

1. Entrepreneurs may look at obtaining financial support from foreign investors who may now be more prepared to invest in the country.
2. Entrepreneurs may look at starting joint ventures with collaboration from foreign firms.
3. Indian entrepreneurs will be in a better position to exploit the other locational advantages that the country has to offer.
4. Foreign investors will now, more than ever, be looking out for reliable Indian partners to avail of the business advantages that the country has to offer.

While the current political and economic scenario favours entrepreneurship, the practices as being followed in the developed economies for the promotion of entrepreneurship, can only be adopted by factoring in cultural and sociopolitical governance realities, poor infrastructure, unorganised competition and chronic shortages, in the Indian context (Bhardwaj and Sushil 2012). In developing economies such as India, indigenous entrepreneurship education systems are the need of the hour. Though being a practice-driven subject, entrepreneurship needs to be supplemented with contemporary theoretical knowledge (Basu 2014). Thus, it can be said that the ecosystem of entrepreneurship is more conducive today than it ever was and the opportunities available should be availed by the students with entrepreneurial intent. Hence, the importance of entrepreneurship education as an enabler needs to be recognised and given due importance.

#### **4 Objective and Significance of the Study**

The objective of the paper was to make an analysis (qualitative) of the efforts made by the B-Schools, with a focus on those who have their own entrepreneurship development cells, in Delhi and NCR, towards entrepreneurship education. Based on this, the paper aimed to come out with suggestions, at institutional level, to foster an encouraging environment to orient and induce the younger crop of students towards creation of new ventures.

Although there are arguments that the entrepreneurial spirit is innate, the credibility of entrepreneurial education to effectively foster entrepreneurial attitude, with requisite training, is gaining ground (Drucker 1985; Trivedi 2014). This goes on to show the significance of the paper.

#### **5 Methodology**

A qualitative research design was adopted to explore the contributions of entrepreneurship education towards preparing students to start their business ventures. Being an exploratory study, it dealt with the contributions of B-Schools, having entrepreneurship cell, in Delhi and NCR, towards entrepreneurship education

(only these schools were targeted for the study). While eight identified B-Schools were approached, data from only six schools could be obtained through email. Based on the issue being addressed and the literature review, a number of questions emerged which were put across to the targeted respondents. The sample comprising of 6 senior faculty members, in charge of their respective entrepreneurship cells, were interviewed. They were requested to give their responses to 14 structured questions. The respondents were required to share the practices related to entrepreneurship education in their respective institutions as well as certain general questions, wherein their opinion was sought. The educational institutions included in the study were business schools and the study limited itself to education of students at post-graduation level only. Data being small, a qualitative analysis was resorted to, with an attempt at content analysis, in order to find out the current trends in entrepreneurship education.

The aim was to interpret the responses to the questions posed and to identify patterns, based on the information obtained from the respondents (targeted faculty members). In order to maintain confidentiality, the paper does not reveal the names of the B-Schools—instead of their original names, alphabets have been used. As researchers, the objective is to achieve a deeper understanding of entrepreneurship education in its specific context and also to arrive at local interpretations of the same (Silverman 2001).

Consolidating the responses of the faculty members, the paper has come up with a suggested model to enhance the efficacy of entrepreneurship education.

## 6 Findings and Analysis

The responses (to the questions asked to the faculty-in-charge of respective entrepreneurship cells) relevant to the topic have been discussed below.

*When did your institute commence entrepreneurship training/education formally (year)?*

It is realised that irrespective of their age, most of the institutes were mobilised for entrepreneurship education in the last 5–10 years (Table 1). As compared to the institutes in the developed world, this may appear as a late start. However, considering the fact that our economy experienced transition from a closed one to an open economy only in the 1990s, the institutes have done well to have started entrepreneurship education at a time when it has started to enjoy a status as economy booster. These institutes, by the virtue of their established nature and a strong student base in terms of their abilities and focus towards achievement, are well placed to effectively adopt the proven educational processes in the field, as practised at the institutes in the West recognised for their innovative, creative and entrepreneurial output.

Basu (2014) suggested that it is important to develop entrepreneurship as a basic course in business education covering both managerial aspects of new ventures and corporate entrepreneurship or intrapreneurship. Hence, the question posed was:

**Table 1** Age of institute versus experience in entrepreneurship

Institute	Years since inception	Years since commencement of entrepreneurship education
Institute A	23	5
Institute B	21	5
Institute C	60	10
Institute D	33	7
Institute E	16	8
Institute F	19	4

*What is the format of entrepreneurship education being followed at your institute presently? (Core/Elective/Dedicated modules or programmes/any other)?* At five institutes, entrepreneurship is taught as an elective, and at one institute it is taught as a core subject in the 3rd semester as entrepreneurship development. This is indicative of the fact that at most institutes, exposure to entrepreneurship education continues to be an option left to the choice of the students. While the basis for offering entrepreneurship education as an elective alone is likely the fact that this field of education will be chosen by those students who have strong motivation to start a venture and hence will benefit most from it, the premise leads to overlooking of the following:

- (a) Entrepreneurship education adds to a budding manager's personality by helping him/her develop a favourable disposition towards spotting opportunities and taking bold actions, at critical times.
- (b) Entrepreneurship education helps awaken the entrepreneur, those with latent entrepreneurial desires, thus inducing adoption of enterprising behaviour.

At undergraduate level, the effectiveness of entrepreneurship programs is evaluated in terms of students' actually starting of a venture. On the contrary, it is suggested that generally the entrepreneurial activity is performed by 35- to 54-year-olds after significant work experience (Georgellis and Wall 2000; Shane 2008). Based on the above lines, thus the question: *What percentage (approx.) of your alumni has turned entrepreneurs over the last 3 years?* The data indicate that around 5% of the total number of students graduating from these institutes are becoming entrepreneurs. These data alone will not bring to the fore the actual picture about the efficacy of the entrepreneurship education programmes of these institutes as it is very likely that a substantial number of students will be induced into displaying entrepreneurial behaviour at a later stage in their careers.

The trend, as evident from the inputs given by the respondents, supports a previous study by Honig (2004). In that study, it was argued that the intention to start an enterprise is indeed not the most effective outcome on which to base the success of an undergraduate entrepreneurship program. Rather it suggested laying down the desired outcomes as an initial step to program development. Similarly, Boyles and Lang (2009) emphasised on three major categories of knowledge and skills: learning and innovation capabilities; life, leadership and career skills; and

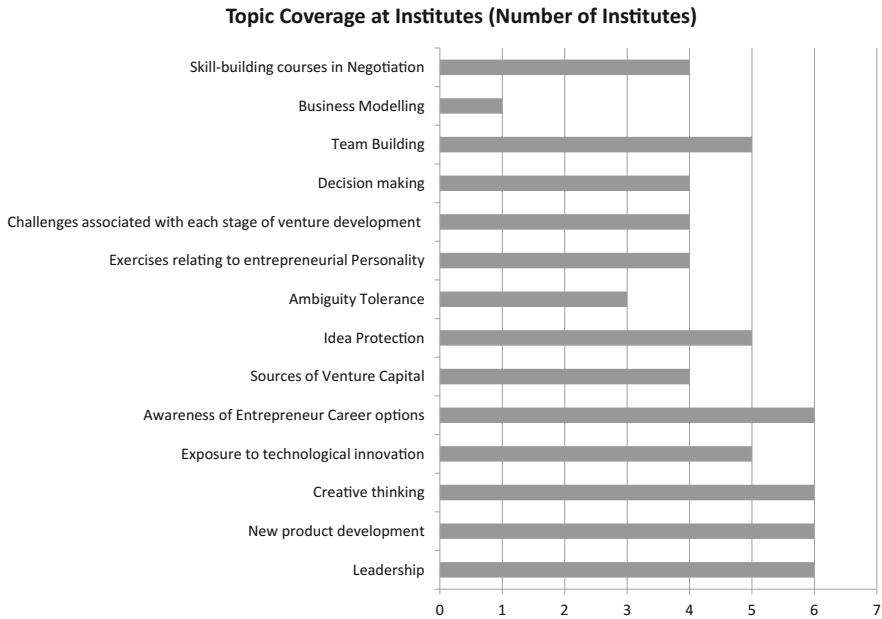
global, civic and business literacy. They were of the view that in order to achieve these outcomes, it is important to involve the students of entrepreneurship in a dynamic and repetitive process of innovation and creation, thus enhancing their ability to take initiatives, think critically, problem solving and learning from failure. Substantiating the above views, it could be proposed that the effectiveness of entrepreneurship education initiatives cannot be measured by taking into account only the number of students creating ventures immediately after their degrees. Helping the students to develop in the above areas also would subsequently lead to motivating them to set up their ventures at some point in time, if not immediately, which also is a measure of effectiveness of such programs.

Research findings have indicated that entrepreneurial capabilities can be developed in an environment of experiential learning where students are encouraged to take up challenges and learn (Pittaway and Cope 2007). This not only helps the students to know about their strengths and weaknesses but also enhances their risk-taking ability and creative thinking by exploiting their full potential and regarding mistakes as learning opportunities and ground for critical thinking (Fuchs et al. 2008). Exposing students to challenging situations not only gives them an opportunity to experience failure and learn from it but also develop their capacity to cope with more serious challenges (Fayolle and Gailly 2008). Taking on from here, the question asked to the respondents was: *Which of the following is included in your entrepreneurship education programme?*

From the andragogical processes being adopted by the institutes, targeted in the study, it is seen (Fig. 1) that, firstly, topics on leadership, new product development, creative thinking, exposure to technological innovations, awareness of entrepreneur career options, team building and idea protection are being covered by almost all the institutes. Secondly, topics on sources of venture capital, exercises related to entrepreneurial personality, challenges associated with each stage of venture development, decision making and skill-building courses in negotiation, though being covered at majority of the institutes, were not being covered at two of the institutes, and these institutes must consider including these topics as they are important in building entrepreneurial skills. Finally, ambiguity tolerance and business modelling, as topics on entrepreneurial education, were being covered at only three and one institutes, respectively. These topics are very important in the light of the constantly increasing dynamism in the business and technological environment of the day and its effect on the venture creation and management processes. Therefore, all institutes will do well by including these last two topics in their entrepreneurship education programmes.

Saravanakumar and Saravanan (2012) suggested that in order to develop entrepreneurial attitudes among students, there needs to be a significant focus on not only what is taught but also how it is taught. A classroom environment must foster enterprising behaviour, alongside business insight and understanding. While most B-Schools cover the legal and managerial aspects of entrepreneurship, very few stress upon the motivational aspects connected with it (Rehman and Elahi 2012). Hence, the question posed to the respondents was: *Which of the above are more critical areas and need special attention by faculty in a classroom situation?* While





**Fig. 1** Breadth of topics covered at institutes

the faculty at one of the institutes was of the view that all of the above need special attention, another highlighted venture capital, negotiation skills and new product development as being more critical areas within entrepreneurship education. A third institute was of the opinion that issues pertaining to idea protection, finance and capital raising and case studies on start-ups in India were the critical areas. According to the fourth institute, special attention needs to be given to business modelling, which already is a part of their entrepreneurship education program. The fifth institute emphasized on awareness of entrepreneur career options, skill-building, courses in negotiation and creative thinking and sources of venture capital.

From the above, it emerges that six institutes have highlighted the criticality of the topic—sources of venture capital. On all other topics, each institute has its own set of priority assignment. Clearly, capital management for venture creation has emerged as the common area of concern.

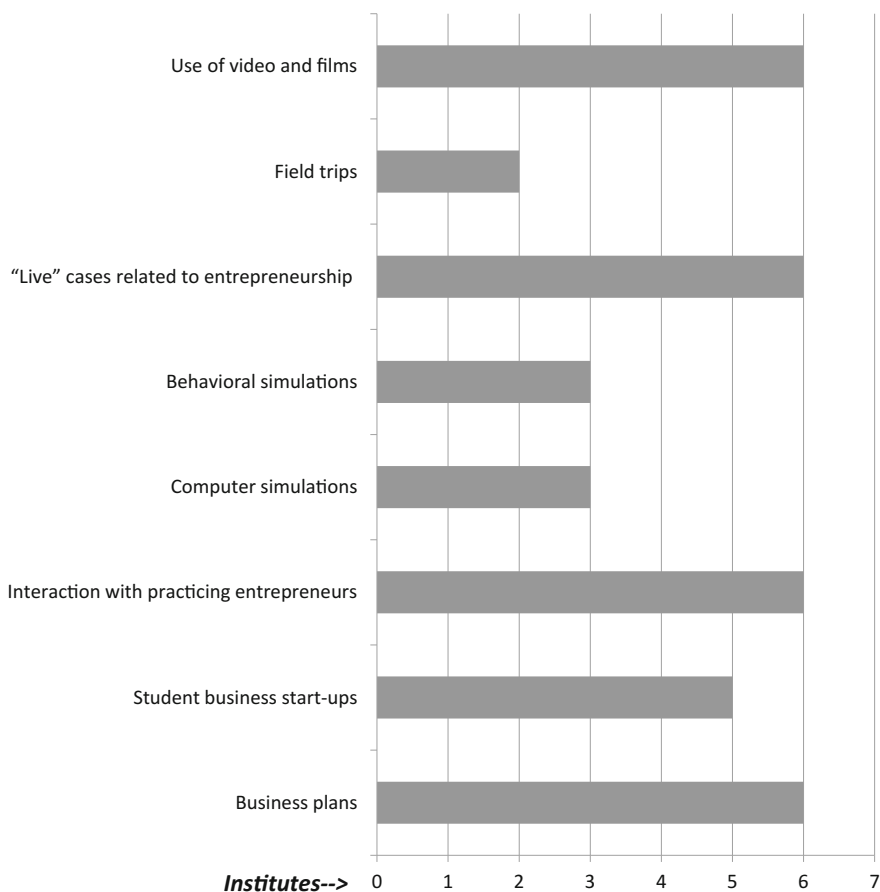
The above findings are also supported by a study by Rae (2013) in which it was suggested that a tutor plays a crucial role in providing a learning experience thus enabling entrepreneurial and personal career development. The tutor needs to engage in a one-to-one dialogue with every student regularly which could be demanding in terms of time and emotionally, especially when the group size is a large one. However, this sort of attention, guidance and feedback is much desired and helpful for developing the students.

To supplement here, according to Mwasalwiba (2010) the three methods used most often are lectures, case studies and group discussions. Other methods include

business/computer or game simulations (Hindle 2002); role models or guest speakers; business plan creation; and project works; games and competitions; setting of real small business ventures, workshops, presentations and study visits (Keogh and Galloway 2004). This latter category of methods is termed “active” and is said to be more appropriate for nurturing entrepreneurial attributes among participants (Bennett 2006), but they are used less than traditional methods.

In order to see the practice followed among the respondent institutions, the question framed was: *Which of the following learning tools are used to enhance entrepreneurial skills and creativity, at your institute?*

As far as adoption of learning tools is concerned, all but one institute use business plans, student business start-ups, interaction with practising entrepreneurs, live cases and video films in their andragogy. Computer simulations, behavioural simulations and field trips, as tools of learning, are being adopted by only three of the institutes (Fig. 2).



**Fig. 2** Learning tools employed by the institutes

Importance of building entrepreneurial skills in the trainees was stressed upon by McMullan and Long (1987) who were of the view that entrepreneurship education should include skill-building courses such as negotiation, leadership, creative thinking and also exposure to technological innovation and new product development. As a requisite of entrepreneurship degree, Vesper and McMullan (1988) suggested that it is important to incorporate courses in building skills related to entrepreneurship, in addition to courses imparting knowledge pertaining to entrepreneurship. In the context of entrepreneurship, Taatila (2010) stressed upon the importance of learning in the relevant business environment, while also emphasising the need for real-life case studies based around student-centred and pragmatic pedagogical approaches. Therefore, the importance of learning tools helps the students get a feel of the business environment.

Research findings of a survey done by Entrepreneurship Development Institute, India (EDII) in 2003 (in Rehman and Elahi 2012) highlighted that younger generation is often apprehensive about starting their own ventures due to lack of confidence and the requisite capability and business knowledge. The university education system is not very effective in infusing confidence, risk-taking ability and the ability to take challenges. As a result, there is no demarcation between entrepreneurship courses and business management courses. Additionally, management education has not been able to boost entrepreneurial attitudes. Based on this, the question posed was: *List the major challenges faced by the budding/first generation entrepreneurs in India, today (in the order of importance, "1" being the most important)*. In the current study, it is apparent that venture financing is considered by five out of the six institutes as a major challenge confronting budding entrepreneurs. Other challenges, viz. technology obsolescence, exit options, mentorship from seasoned entrepreneurs, availability of resources at right time for rapid acceleration, support system (psychological), awareness of existing business ecosystem relevant to the venture, awareness of existing successful business models relevant to their area, network, access to talent/human resources, interactions with their intended customers, identification of opportunities, motivation for entrepreneurship, knowledge of functional areas, how to start and manage business, and red-tapism have been highlighted separately by individual institutes. While each of the areas, highlighted as a challenge to budding entrepreneurs, merits consideration for structuring entrepreneurship education programme, venture financing should definitely be accorded higher importance.

Based on the findings of the survey by Entrepreneurship Development Institute, India (EDII) in 2003 (in Rehman and Elahi 2012), the steps required to enhance the efficacy of entrepreneurship education at B-Schools needed to be identified and hence the question: *What steps can B-Schools take to improve the efficacy of their entrepreneurship education programme?* The common theme that emerges from the responses of the institutes to the question of how to make entrepreneurship education more effective is the implementation of experiential pedagogy, training by and interaction with entrepreneurs and use of project-based courses (industry focus). Making of entrepreneurship education, both compulsory and specialisation too, has been recommended to enhance the efficacy of these programmes.

The findings of a study by Seikkula-Leino et al. (2010) suggested that often the teacher involved in entrepreneurship education are themselves not very clear about the objectives of same. This leads to their poor understanding of entrepreneurship education and practice further leading to the inability in meaningfully focussing on reflection. Hence, the question posed: *Apart from the characteristics of a good teacher, what additional skills, knowledge and attitude should the faculty delivering entrepreneurship education, possess?* While analysing the responses, industry/ entrepreneurship experience emerged as the most preferred qualification, amongst others (this has been highlighted by five out of six institutes). Other attributes include knowledge of venture start-up process, skills and attitudes of a facilitator, mentoring as a coach, training skills in start-up simulations, be updated with the latest in start-up field (Silicon Valley news) and networking with entrepreneurs.

In order to explore the initiatives taken by B-Schools to further entrepreneurship education, the question thus asked was: *Does the institute have any collaboration with other institutes, both, national and international, as well as with industry bodies for furthering entrepreneurship education? If so, please name them.*

All the institutes have tie-up with various bodies to support potential entrepreneurs through entrepreneurship education. One of them has a collaboration with TiE (The Indus Entrepreneurs). Three of them have a collaboration with NEN (National Entrepreneurship Network), one has an agreement with MSEMEDI (The Micro, Small and Medium Enterprises Development Institute), New Delhi, another with AICTE for its entrepreneurship-related efforts and one has collaborated with local start-ups and alumni start-ups. This is an indication of practical orientation of the students apart from the theoretical base.

According to Gorman et al. (1997), empirical studies focussing on educational structure and processes broadly fall into two categories: (a) studies examining the implications of teaching strategies, learning styles and delivery modes, primarily post-secondary education; and (b) programs descriptions and surveys presenting the current status of entrepreneurship education. Based on this, the question thus posed was: *What steps has the institute been taking to encourage research in entrepreneurship?* As put by the respondents, when it comes to the initiatives taken to encourage research, including PhD in entrepreneurship, the efforts of the institutes are limited to research work by faculty involved in entrepreneurship education and organising of seminars and conferences on issues of entrepreneurship. Research in entrepreneurship education by faculty and industry bodies has to be encouraged and promoted to enhance the efficacy of this rather young field of education.

It is quite a controversial issue whether potential entrepreneurs need to be identified or not. According to Dearborn (2012), while entrepreneurship education is primarily aimed at enabling budding entrepreneurs to turn a new idea into a reality, it also gives the students the ability to view their careers and opportunities in a different light. Therefore, it is important that all the students be exposed to entrepreneurial-focussed education and not just those planning on entering the start-up world. Hence, the question posed to the respondents: *In your opinion, is there a need to identify potential entrepreneurs and include only them in entrepreneurial development programmes or any student who has even bit of an*

*inclination?* Faculty members from three institutes favoured the idea of identifying potential entrepreneurs and including only them in entrepreneurship development programs. While the three others have viewed that such selection is not required keeping in mind that may be after attending such programs students may change their plans.

Differing from others, the results of a longitudinal study with three research stages conducted by Santos and Caetano (2014) on 74 participants showed that: (a) selection of entrepreneur participants with highest potential for an entrepreneurship programme is important for the success of the programme and (b) the entrepreneur selection method based on submission of business plan was able to select participants with highest potential in terms of entrepreneurial behaviour and intent. Hence, it was suggested that in addition to business plan submissions and qualitative assessments, having tests for selecting potential entrepreneurs would contribute to effectiveness of the entire process. This would help incubators and policymakers identify incubate applicants having the highest probability chance of succeeding in their project proposals.

Thus, it could be said that there are contradictory views regarding this, and at this stage it is difficult to establish which one would be effective.

There was a question posed as to *whether there has been a trend of increased importance for entrepreneurial activities vis-à-vis placement activities for the students, at your institute?* Four out of the six institutes were of the view that though there have been some indications of a shift towards preference of entrepreneurial career over conventional career, it is only minuscule. At one of the institutes, many of the students actively work towards developing and improving their own family businesses and hence did not pay adequate importance to the placement activities. Hence, it is important here that educational institutions need to give, if not more, at least equal priority to entrepreneurial activities. Rehman and Elahi (2012), in their paper, quoted an earlier study (Placement Report of MBA Universe.com, 2008) that there has been an interesting trend among top B-School students to opt out of placement process to start their own entrepreneurial venture. However, the same among the B-Schools in Delhi and NCR, in the current study, does not seem very encouraging.

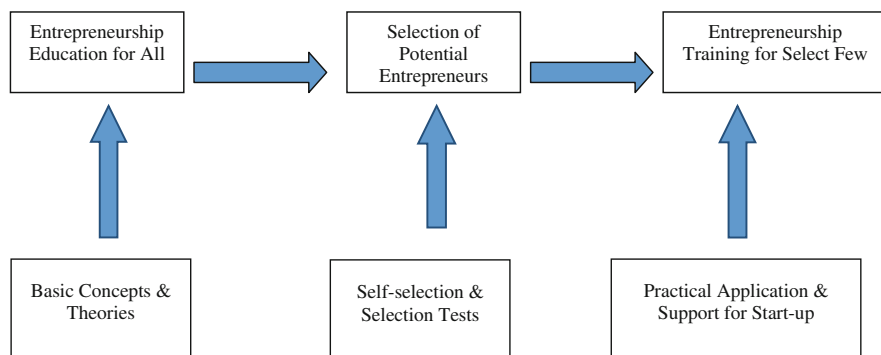
When asked about *the additional (if any) initiative(s) your institution is planning to undertake, that would contribute towards entrepreneurship development*, two out of the six institutes plan to set up an incubation centre. Business plan competitions at a state and national level have been reiterated as a future initiative, by four out of the six institutes. Going further, three of them look forward to helping students connect with venture capitalists and angel investors and private equity linkage. One of them would be interested to engage students in live projects offered by real start-ups. Five out of six institutes would be putting in efforts for more guest lectures and workshops related to entrepreneurship.

Based on the above-highlighted issues and the findings of the study, the paper has attempted to come up with a model of entrepreneurship education as under:

## 7 The Model

The above model (Fig. 3) evolves from the study with the following salient aspects of entrepreneurship education having got highlighted (explanation of the suggested model):

- (a) **Entrepreneurship Education for All:** Certain aspects of the topics covered during entrepreneurship education programme are relevant to both the budding entrepreneur and the budding manager, and hence both must be exposed to “entrepreneurship education for all”.
- i. It is important to acknowledge the distinction between entrepreneurship education and business management. While the former is about originating, or starting, a company, the latter consists of operating an existing company (Zeithmal and Rice 1987, cited earlier in this paper). This distinction between the two fields is also a justification for business courses to expose all its students to entrepreneurship education as even a manager must have an understanding of the process of originating a company, the kinds of which he or she manages.
  - ii. This would also comprise of the classroom environment for nurturing enterprising behaviour and also motivating the students towards looking at entrepreneurship as a possible career option (Rehman and Elahi 2012, cited earlier in the paper).
  - iii. While all those exposed to entrepreneurship education may not exhibit entrepreneurial intent immediately, many may exhibit entrepreneurial intent in due course of time, when they feel comfortable with the idea, based on their professional experience, financial status or other factors (drawing from Drucker 1985 and Trivedi 2014 study, mentioned earlier in the paper). Substantiating this, while entrepreneurial spirit is innate the credibility of entrepreneurial education to effectively foster entrepreneurial attitude with requisite training is gaining ground.



**Fig. 3** Entrepreneurship education model

- iv. Development of entrepreneurship as a basic course in business education covering both managerial aspects of new ventures and corporate entrepreneurship or intrapreneurship has been accorded due importance by Basu (2014) too. While most may utilise the “knowledge”, “skills” and “attitude” developed in this education to add value to their professional delivery, intrapreneurship will be an important by-product of such education programme, which in itself is an essential process for ensuring competitiveness of organisations.
  - v. The capabilities and skills enumerated by Boyles and Lang (2009), mentioned earlier in the paper, while being very important for entrepreneurs, are equally applicable to business managers too. Hence, instead of making it an elective as it is being done in most of the sample B-Schools it is suggested to be made part of the core subjects. By doing so, may be, those students who had never given a thought to be on their own might rethink. Emphasis on learning and innovation capabilities; life, leadership and career skills; and global, civic and business literacy are the major categories of knowledge and skill that are required to be acquired in an entrepreneurship training programme. These, while being very important for entrepreneurs, are equally applicable to business managers too.
- (b) **Selection:** In selection of potential entrepreneurs, it is important to identify those who exhibit the desire and potential for entrepreneurship. Advanced entrepreneurship training is suitable for selecting few students who display an inclination to start a venture in the near future, for the following reasons.

According to Santos and Caetano’s study (2014, cited earlier in this paper), the success of an entrepreneurship program depends on the selection of those with the highest potential in terms of entrepreneurial behaviour and intent, for example on the basis of submission of business plans. In the current study, 50% of the respondents agreed to the idea of identifying potential entrepreneurs, i.e. including only them in the entrepreneurship development programs. It is felt that a selection process would be useful, considering the amount of resources being put into the training process.

- (c) **Entrepreneurship Training for Select Few:** Advanced entrepreneurship training is suitable for selecting few students who display an inclination to start a venture in the near future, for the following reasons.
- (i) Approximately 5% of the total number of students graduating from B-Schools in Delhi and NCR, considered in the study, have become entrepreneurs.
  - (ii) Reiterating the views of the respondents in the study, apart from industry experience, attributes such as knowledge of venture start-up process, skills and attitudes of a facilitator, mentoring as a coach, training skills in start-up simulations, being updated with the latest start-up field (Silicon Valley news) and networking with entrepreneurs would be required in order to train the selected few potential entrepreneurs.

- (iii) Development of entrepreneurial skills through experiential learning exercises, in itself, demands investment in terms of experienced faculty, low trainer–trainee ratio and andragogical methodology which is different from the regular classroom teaching. Also, return on investment (ROI) being low, it follows that only those exhibiting a strong intent for entrepreneurship should eventually be put through special training to equip them for it.

Entrepreneurship is not only about starting new ventures. It is also about developing in budding managers the attributes of opportunity spotting, proactive outlook, moderate risk-taking and quick decision-making. Therefore, should one look at a model of entrepreneurship education where only those with displayed potential for entrepreneurship are exposed to it, it may result in excluding many who may either benefit from it in regular managerial jobs or those who may be induced into entrepreneurial behaviour at a later stage in their careers. On the other hand, should all the students in the B-Schools be put through the complete rigours of an intensive course in entrepreneurship education programme, it may result in lower ROI (return on investment) as majority of the students may, as per the current trends, not opt for entrepreneurship as their career choices.

In view of the above, to draw optimum benefit from entrepreneurship education programmes, it is suggested that a three-step programme implementation system be followed as given below:

- (a) Step 1 (Entrepreneurship Education for all): This step will address the need for basic entrepreneurship education for all students. In this step, the *basic theoretical concepts* of all the topics related to entrepreneurship are covered.
- (b) Step 2 (Selection of Potential Entrepreneurs): The second step will be to *identify and select trainees* for further training in entrepreneurship. In this step, based on a battery of psychological and aptitude tests, students with the potential to develop into successful entrepreneurs are identified from amongst a pool of self-selected volunteers.
- (c) Step 3 (Entrepreneurship Training for Select Few): The final step will focus on intensive training for selected students who have displayed strong entrepreneurial inclinations, coupled with their inherent potential to be entrepreneurs. This step will be oriented more towards *practical application* of the topics taught in Step 1, coupled with necessary support to actually *start a venture*.

The topics covered in entrepreneurship education at most of the institutes addressed in the study may be classified (Table 2) under two categories, viz. general topics and theories which are the topics of relevance to both budding entrepreneurs and managers, and hence fall under the category of “entrepreneurship education for all” and topics relevant to a budding entrepreneur only, i.e. “entrepreneurship training for the select few”. Topicwise classification is suggested as below:



**Table 2** Topics covered in entrepreneurship education

No.	Entrepreneurship education for all (general topics and theories)	Entrepreneurship training for select few (topics of practical application and support for start-up)
1	Skill-building courses in negotiation	Business modelling
2	Team building	Idea protection
3	Decision-making	Sources of venture capital
4	Ambiguity tolerance	Exposure to technological innovations
5	Creative thinking	New product development
6	Leadership	Challenges associated with each stage of venture creation
7	Awareness of entrepreneurship career options	Exercises related to entrepreneurial personality

## 8 Limitations and Suggestions for Future Research

The study, being qualitative with a small sample size, the following will have to be addressed to ascertain their applicability in entrepreneurship education programmes, through qualitative research:

- (a) The model of “entrepreneurship education for all and training for a select few” finds justification in the study and also enjoys intuitive support based on the responses of the respondents. The applicability of the model, however, will need to be ratified through a further in-depth quantitative research on the issue.
- (b) The study suggested that it is important to include the topics of venture capital, ambiguity training, business modelling and coverage of the various government schemes, in the entrepreneurship education programme at all institutes. While the need for coverage of the topics is justified, the level and methodology of coverage of these topics is another important avenue of research in this area.
- (c) This study suggests that it was preferable to have instructors/teachers with entrepreneurship or industry experience, deliver the programme. This is another area of future research wherein the suggestion could be tested.
- (d) The specific topics that should be classified under “entrepreneurship education for all” and “entrepreneurship training for the select few” needs to be based on primary data, which subsequently could help the B-Schools.
- (e) Another limitation of this type of study is the generalisability of the results. According to Creswell (2003), the results of exploratory studies are often used to chalk out the path for further studies. The current study has explored the factors put forth by B-Schools in Delhi and NCR which also gives direction for further study.

## 9 Discussion and Conclusion

It is a healthy sign (as seen among the B-Schools, in Delhi and NCR) that in spite of the rather recent start, when compared to commencement of entrepreneurship education in a formal form in the institutes in the developed world, the institutes, by the virtue of their established nature and a strong student quality, are well placed to effectively adopt the proven educational processes in the field. In their delivery of entrepreneurship education, however, the institutes need to include larger student base by adopting basic entrepreneurship education for all. This will secure the advantages of entrepreneurship education for all the students preparing to be managers and entrepreneurs. Education, training and coaching requirements of those with strong and immediate entrepreneurial desire must be addressed separately and in an intensive manner through an androgogical approach to entrepreneurship education with a healthy stress on affording opportunities for hands on experience and intensive interaction with entrepreneurs and industry experts.

As regards the course content, it is important that in addition to the other regular topics, the topics of venture capital, ambiguity training, business modelling and coverage of the various government schemes to help entrepreneurs are made an essential part of entrepreneurship education. These topics are very important in the light of the fact that managing venture capital is a major area of concern for most budding entrepreneurs and also the constantly increasing dynamism in the business and technological environment has its effect on the venture creation and management processes. Also to ensure a high level of efficacy of entrepreneurship education programme, it is a good idea to preferably have instructors/teachers with entrepreneurship or industry experience, deliver the programme.

To actually support the process of venture creation by young entrepreneurs, institutes must consider setting up of incubation centres and also seek help from organisations like TiE, NEN, MSMEDI and AICTE, as also with local and alumni start-ups. This also shows the support provided by different bodies here for strengthening the ecosystem of entrepreneurship education.

As far as research in the field of entrepreneurship, to create new, updated and relevant knowledge base, is concerned, B-Schools must encourage both faculty involved in entrepreneurship education and other faculty members from the fields of finance, marketing, IPR, human resource management and industrial psychology, to undertake research work in entrepreneurship, with specific focus on aspects related to their specific fields.

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# Chapter 19

## Business Opportunity Recognition and its Facilitation by Entrepreneurship Education: Perception of Nepalese Entrepreneurs

**Binod Krishna Shrestha**

**Abstract** Past research has indicated that entrepreneurs perceive a possibility of creating new businesses through three basic steps, namely perception, discovery and creation. However, extant research ignores how the individuals actually identify the opportunity. This study explored on the process of opportunity recognition of 31 successful Nepalese entrepreneurs through analysis on their life stories collected from in-depth interviews. This study explored whether the entrepreneurs were inspired to start a particular business from their personal experiences, family members and friends. Inspired individuals continuously search for clues to identify business opportunities using different sources of information. They figure out whether the opportunities match their resources. Once they start a business, they continuously change their strategies in response to changes in the market, resources and government policies. Based on the findings, this research study proposes a model for business opportunity recognition. The findings of this study have implications for entrepreneurship development and start-up businesses.

**Keywords** Creation · Discovery · Entrepreneurship · Nepal · Opportunity recognition

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## 1 Introduction

Opportunity recognition is a crucial process of a venture creation. In this stage, entrepreneurs perceive a possibility of initiating new businesses or improving existing businesses (Christensen, Madsen and Peterson 1989). Past research indicates three basic steps in opportunity recognition, namely perception, discovery and creation in which entrepreneurs perceive about the opportunity and create a new business concept matching their resources with the identified market needs (Shane 2000).

Christensen and Peterson (1990) have stated that sources of venture ideas are specific problems and social encounters. In addition relevant business knowledge develops entrepreneurial mindset and ability to recognize the problems and exploit the problems into opportunities. Such mindset is characterized by the capacity to sense, act and mobilize within dynamic environments (Haynie, Shepherd, Mosakowski and Earley 2010). For opportunity recognition and evaluation of potential business opportunities, entrepreneurs need to be alert to notice factors in their domain of experience (Ardichvili, Cardoza and Ray 2003). Therefore, opportunity recognition involves a process from perception to creation of a successful business and the intricacies of skills and behaviour of entrepreneurs in different stages in the process. However, research on how a specific person identifies opportunities is not known (Baron 2007). In addition there is less empirical research in this theme of entrepreneurship especially in developing countries like Nepal which is characterized by dynamic and uncertain business environment. In addition, entrepreneurship practices in South Asian countries are multicultural specifics.

The main objective of this research was to explore the opportunity recognition model that successful entrepreneurs used in their entrepreneurial process and corresponding factors and their relationships. This study investigated the factors that inspire entrepreneurs to opt for the particular business idea, the factors that determine the entrepreneur's business ideas generations, the process that entrepreneurs sense the business opportunities, discover fit between the business opportunities and their resources and convert the idea into successful ventures and finally sustain the entrepreneurial ventures through adjustment and readjustments.

## 2 Literature Review

### 2.1 Opportunity Recognition

Entrepreneurship is driven by perception of opportunity (Stevenson, Roberts and Grousbeck 1985). Business opportunities are defined by different researchers. de Bono (1978) states that opportunity is a possible and worth pursuing course of action using nonlinear creative thinking. Kirzner's (1979) definition states that an opportunity is entrepreneur's knowledge and recognition of commercial value of

products or services to be sold in new markets at profit. Similarly, opportunity is a detail plan to translate the business concept into reality (Long and McMullean 1984). These definitions suggest that business opportunities are creative plans of entrepreneurs to convert business idea into commercial reality. The researchers also emphasize on meeting customers' needs while defining business opportunities. Hulbert, Brown and Adams (1997) define business opportunity as the possibility to meet an unsatisfied need in profitable manner. Ardichvili, Cardozo and Ray (2003) emphasized about delivering superior value through a creative combination of resources to meet a market need or interest or want. Drucker (1985) states that entrepreneurs search for change in customers' needs, recognize the change and convert them into opportunity in the process of business innovations. Therefore, opportunity recognition involves a process of perceiving business opportunity in fulfilling customers' unmet needs, and planning for it for achieving a commercial success by selling products and services.

## ***2.2 Opportunity Recognition Process***

It appears that opportunity recognition to happen the ultimate stage is confirming whether business idea can be converted into commercial reality through a process starting from insight followed by different stages of evaluation to finally develop a way out of starting a business with commercial success. Researchers mentioned different steps of opportunity recognition. They include a creativity process of preparation and incubation leading to insight of business ideas and subsequently their evaluation and elaboration for business opportunity (Lumpkin, Hills and Shrader 2004) and decision to proceed (Long and McMullan 1984). Ardichvili et al (2003) include three distinct steps: (1) sensing needs in market and resources, (2) discovering a match between the market needs and specified resources and (3) creating a new fit in the form of business concept by matching the market needs with the resources.

This research adopts the three-stage opportunity recognition process involving perception, discovery and creation. Some researches state that opportunity recognition process starts from either external stimulation in which entrepreneurs search opportunities by filtering and massaging ideas, and elaborate them in order to start a business or internal stimulation in which entrepreneurs first discover customers' problems to be solved or needs to be fulfilled (Bhave 1994).

A complete creation of business concepts involves not only perception of opportunity but also real actions of testing opportunity in the market place in order to confirm the business model through iterative process. Therefore, opportunity recognition alone cannot create a viable business without opportunity development (Ardichvili et al 2003). Similarly, Alvarez and Barney (2007) state that entrepreneurs create business opportunities rather than discovering of what already exist through iterative process in which they change and re-change their strategies to finally create a business opportunities. Entrepreneurs craft, shape, mould and

reconstruct opportunities in an iterative process in which they carry out fit and balance among opportunities, resources and team to get the odds in their favour and consider the opportunity as moving targets (Timmon and Spinelli 2009). Entrepreneurs engage in exploring ideas and evolving their strategies through guesswork, analysis and actions (Bhide 1994). Therefore, opportunity recognition is a continuous process of analysis and action which take place before business start-up and after the business come into operation.

This research study focuses on elements that inspire successful entrepreneurs into a particular business idea or business sector, help in the opportunity recognition process, facilitate in fitting the opportunity with resources and team and finally create a business.

### 2.3 *Antecedents*

Different antecedents play crucial roles in influencing an entrepreneurs' decision to enter into entrepreneurial career, an entrepreneur's perception of business opportunity and the creation of a commercial venture. One of the antecedents of opportunity recognition is entrepreneurs' alertness which is influenced by environment and entrepreneurial self-efficacy (Tang 2008). Entrepreneurs are alert which help them to notice business idea without search, i.e., aha experience (Kirzner 1979). Entrepreneurial alertness makes them sensitive towards new patterns revealed in information about the problems and resources allocation (Gaglio and Taubs 1992) which develop superior pattern recognition skills of noticing connections between trends, changes and events (Baron 2007). Hills (1995) states that entrepreneurs evaluate different opportunities based on gut feeling rather than formal evaluation framework. Therefore, prior researches indicate that entrepreneurs use cognitive skills of opportunity recognition and its evaluation intuitively rather than systematically.

In contrast, other scholars state that entrepreneurs spend time on information search and entrepreneurs have superior access to information and search behaviour (Kaishand Gilad 1991). Long and McMullan (1984) state that entrepreneurs put tremendous preparations which make other people to do same thing and inaccessible to recognize it. However, entrepreneurs identify opportunities through means-ends framework (Shane and Eckhardt 2003). Therefore, opportunity recognition is a moment of insight about commercial potential of a business idea for which entrepreneur's knowledge about the market is necessary (Gaglio 1997; Christensen and Peterson 1990). This type of knowledge helps them to develop ability to recognize the problems and exploit the problems into opportunities. Such ability develops entrepreneurial mindset in an individual which is characterized by the ability to sense, act and mobilize resources within dynamic and uncertain environments (Haynie et al. 2010).

Industrial experience and knowledge help entrepreneurs in the process of market gaps recognition and market assessment of potential of a new venture



(Ardichvili et al. 2003). Prerequisite for opportunity recognition is the prior experiences which can be further gained from failure in the first attempt (Hills and Singh 2004). This experience factor especially of markets is important for opportunity recognition (Shane 2000; Ardichvili et al. 2003; Hills and Singh 2004). In line with this, Vesper (1996) and Bygrave (1997; Kakati 2003) also emphasize on prior commercial experience. It appears that entrepreneurs' alertness is closely related to entrepreneurs' market knowledge and experiences.

Social network theories state that the entrepreneurs' diverse social networks improve quantity and quality of information and speed of acquiring the information (Aldrich and Zimmer 1986; Uzzi and Spiro 2005). Therefore, diverse social network is one of the factors influencing opportunity recognitions (Stuart and Ding 2006) because they contribute in resource mobilization in venture creation (Stuart and Sorenson 2007). Therefore, entrepreneurs involve networking with diverse people (Dyer, Gregersen and Christensen 2008). Therefore, entrepreneurs' alertness and corresponding abilities of information search, and pattern recognition are supported by their self-efficacy, i.e. perception of ability to do which is influenced by their prior knowledge, experiences and social networks.

The past research appears to have focused that opportunity recognition is result of alertness and intuitive evaluation of the business ideas, which is supported by their knowledge and experiences. However, it is not clear that how it takes to convert the initial perception of opportunity into discovery and creation. If recognition is said to be plan of action to convert the idea into opportunity, it should involve all the steps from perception—discovery to creation. On the contrary, entrepreneurs go through continuous process of idea perception, discovery and creation while at business through trial-and-error and fit and balance theory. Therefore, this paper explored on opportunity recognition process starting from entrepreneurial career aspiration, opportunity perception, discovery and creation; and dynamics and mechanism involved in the process. This research is important in order to draw guidelines to facilitate potential entrepreneurs to make them able to have complete opportunity recognition and development.

## 2.4 *Entrepreneurship in Nepal*

Since the study is focused on Nepalese entrepreneurs, discussion of the context is important. The constraints on capital availability, technical skills, access to new technology and marketing in Nepal's situation make entrepreneurship by Western standards not ideal in Nepal (Zivetz 1992). The author further elaborated that entrepreneurship has been a counterpoint to the traditional ruling elites and means to gain economic for politically and socially marginalized communities. Therefore, entrepreneurship development in Nepal depends on willingness of the ruling elites to slacken its grip on resources and power in the larger national interest. In addition, high-caste people dominate their position in educated people, bureaucracy and politics who have hierarchic and fatalistic attitudes with all the maladies of *chakari*

(sycophancy) and *afnomanche* (ones' own people) attitude with the hands on power and resource management (Bista 1990). In this context, the most important for any one is personal acquaintance than knowledge about the facts and rules. This situation is obvious with the fact that entrepreneurs protest that government policies keep changing, promised facilities are meted out on the basis of source and force and ad hoc basis; and government say that entrepreneurs misused the policy by looking at loopholes in rules to enhance profit. For the communities who have access to power, business is an extension of political control rather than risk taking and innovation unlike marginalized communities.

Bista (1990), a famous Nepalese anthropologist, stated that Nepalese people believe that one's circumstances have been determined by a supreme deity, which is the consequence of deeds of a previous life. He further mentioned that the attitude towards work is that it should be without a goal and that the material world is considered to be *maya* (an illusion) and prosperity is considered to be corruption. Therefore, people are advised to work harder just to earn their subsistence. Contrary to the concept of *nishkaam karma*, people consider *karma* to be a fate determined by the god before birth. Therefore, they think that it is wise to avoid work because work is pain (*dukkha*) and if they do not need to work it is bliss (*sukha*) and fortunate.

### 3 Methodology

Case study method was used for this research study. Specifically, in-depth examination of multiple entrepreneurs was used and compared results across the case (Yin 1994). The research setting was entrepreneur selected based on theoretical sampling (Flick 2006) as they were the one who went through opportunity recognition and development process in the last ten years of their successful entrepreneurial endeavours. The primary theoretical consideration for their inclusion was that these entrepreneurs had reported some practices of opportunity recognition in the past.

#### 3.1 Sample Description

The entrepreneurs of 31 firms were interviewed (Table 1). Seven of them were in trading business such as imports and retailing of fast moving consumer goods, pharmacy, fashion wears and chemical products. Another eight were manufacturing firms from sectors such as pharmaceutical products, agro products, handmade paper, textile, garments and auto workshop. Six firms were in education services, such as school and colleges, education and training and education consulting. Five

**Table 1** Participant firms

Area of business	Number
1. Trade	7
2. Manufacturing	8
3. Education	6
4. Advertising	3
5. Financial services	2
6. Tourism services	5
Total	31

*Source* Author calculations

were involved in tourism industry such as hotels and lodges, restaurant and travel and tours. The remaining firms were in other services such as advertising and financial services. A precondition was set that all the firms must have been initiated more than 10 years ago to qualify for the interview.

### 3.2 *Data Sources*

This study relied on qualitative data collected from semi-structured interviews with entrepreneurs. The interviews were started with a few open-ended questions in order to generate responses from the entrepreneurs such as follows: In what way you came up with this business idea? How did you decide this business rather than others? How did you make sure that this business would make money or be successful in the market? How did you ensure that this business is suitable to you? How did you overcome the problems you faced during difficult time? What strategies did you follow to make you ahead of others despite competition? These questions were helpful to collect retrospective and real-time data which ensure external and internal validity of the data (Bingham and Eisenhardt 2011). The entrepreneurs were interviewed several times to collect the complete answers. Following Flick (2006), detailed notes of the statements of the respondents were prepared during the interview.

### 3.3 *Data Analysis and Development of Themes*

The analysis began with compilation of the data and synthesizing the results from the interviews for each entrepreneur leading to mini cases. The case stories comprised of answers of all the broad questions asked during the interviews. Then entrepreneurs' statements in the case studies were systematically evaluated and several themes were generated by keeping in mind the literature review and concepts pertinent to the research questions. Sub-themes were collapsed into broader-level themes, and they were reported below.

## 4 Analysis of Findings

This section first presents the results about inspiring elements that help entrepreneurs to make decisions about a particular business idea. This section is followed by the results on the process of opportunity recognition, fitting the opportunities with resources, and development of business opportunities.

### 4.1 *Inspiration for Particular Business Ideas*

Entrepreneurs have predetermined business ideas before recognizing it as opportunities due to their personal desire and interest. An entrepreneur said: *I was always fascinated by the daily consumable food items required for people for their daily consumption.* Another entrepreneur was *inspired by parent who in their time could not establish a private school despite their wish.* Other entrepreneurs came up with business idea while working in similar enterprises, for example, *when working in Alfa Beta Education Consultancy.* Some entrepreneurs generated business ideas as *partners advised.* Other entrepreneurs went through deliberate search for business idea as indicated by these statements: *I desperately wanted to do something on my own but was not able to figure out what would be the best business for me. I visited industrial and market areas on a regular basis. I found out that metal utensils market was flourishing in Nepal, but I did not have access to huge capital required to start this business. Then I searched other business ideas.* Some entrepreneurs generated the business idea to serve society. *When I was studying journalism I came to know about the power of small cooperatives in bringing social transformation.* The others were inspired by their own experiences with products and services. *I was fed up with my observation of public transport in Kathmandu; therefore I came up with this idea to improve transport system.* Some people built a casual job into a business idea which was merely based on luck and the availability of extra space in their house.

Table 2 indicated eight factors as inspirations to start a particular business. The entrepreneurs also discovered customers' problem that needs to be solved as starting point for opportunity recognition, for example, self-experienced problems with products in the past and desire to solve social problem. It was also evidenced that entrepreneurs first recognize idea which still need to be checked whether they are really opportunities.

### 4.2 *Opportunity Recognition*

Clues for opportunity recognition. Entrepreneurs were alert and they recognized possibility of making money out of business that they were inspired of. Different

**Table 2** Inspiring elements for generating particular business ideas

Themes	Illustrative key finding
1. Personal desire and interest	Interest in certain business sector and business idea from the beginning
2. Family members' inspiration	Encouragement and advices by parents and relatives
3. Deliberate search of ideas	Series of activities to explore a new business idea
4. Personal work experiences	Idea generated while working in an organization in the past
5. Personal experiences as customers	Desire to correct problems of products or services which was experienced as a consumer
6. Partners' advices	Partners' advice to start business together
7. Desire to work for social change	Desire to serve the society by establishing a particular business
8. Luck and causality	An idea generated without any planning and search

Source Author analysis

clues and patterns were recognized relating to the identified business ideas as opportunities. They sensed the problems that customers face every day, for example, *the customers were stuck in traffic for a long hour while going for shopping. Had there been home delivery service on the basis of telephone call, they would have paid higher for this comfort.* Entrepreneurs also observed the growth in the customer segment *who desires to have such services due to customers' increasing work pressure.* Some entrepreneurs saw huge gap between cost and selling price, for example, *the cost of raw materials required to feed the chicken was available at Rs. 6 per Kg but the egg could be sold at Rs. 3 per piece and labour cost was also low in this district.* Entrepreneurs also noticed cost disadvantage and supply constraint in the way of doing business: *small poultry businesses were operated as backyard businesses despite huge demand of egg and I could earn higher profit margin, if the poultry business was done in bigger scale.* Some entrepreneurs recognized opportunity by detail observation of constraints in supply chain system such as *the retailers were not able to meet huge demand of imported fashion wears because there were limited number of wholesalers.* Other entrepreneurs noticed supply constraints: *there were only few garment factories to supply enough goods.* The entrepreneurs also noticed restriction on imported goods across the border, for example, *there were good opportunity for imported fashion wear business in Nepal to supply them to India.*

Some entrepreneurs noticed opportunity of imitating the same products of business in which they had worked as employees in the past as they *learnt that many students came to receive educational consultancy services in Kathmandu.* Similarly entrepreneurs also noticed possibility to replicate successful business of other countries, for example, *there was a huge demand of Indian cotton clothes in India which Nepalese businessmen did not know.* Some entrepreneurs noticed opportunities to earn by offering differentiated products to serve emerging needs as

explained by *I was sure that selling food items has a great market potential, if I could differentiate the way the customers were served by adding extra features.* Other entrepreneurs found out that *the lifestyle of the people was changing because people had busy life and number of women working outside the home was also increasing, consequently they wanted to save time in preparing food. I thought if I would offer already cleaned rice, dal and other food, I would be successful to make money.* Entrepreneurs noticed changes in use of technology such as *shift from desktop to personal computer and increasing use of computer systems* and changes in government regulation such as *introduction of commission policy for advertisers.*

Table 3 revealed that entrepreneurs captured different clues to see the pattern. They recognized what customers had been complaining about the products and services, supply constraints in the market and customers' demands in previous organizations. They also looked at the cost and selling prices as clues. In addition, they also looked at the changes in life styles of customers, government regulations and technologies. They also noticed the trade and business situation in other countries as clues for opportunity recognition.

Sources of information. The entrepreneurs used different sources of information during opportunity recognition process. An entrepreneur said that he *visited industrial and market areas and friends' businesses on a regular basis in order to figure out business prospects.* Other entrepreneurs had several rounds of *talks with numbers of potential customers and dug out what they would want.* Some entrepreneurs did *observation on customers' activities and problems.* Others *consulted*

**Table 3** Clues used for sensing opportunities

Themes	Illustrative key findings
1. Problems that customers faced	Inconvenience and dissatisfactions on products and services while purchasing and consumptions
2. Gaps between cost and selling price	Difference between selling price and costs of goods sold
3. Supply constraints in the market	Not adequate products available in the market to fulfil demand
4. Cross-border demand and supply situation	High demand in India but low supply in Nepal or vice versa
5. Customers' demand of the products of employers' businesses	Growing demands of the products or services of the products in previously employed organizations
6. Successful businesses in other countries	The products or services that was successful in foreign countries
7. Need of differentiated products	Undifferentiated products in terms of feature and services in the market for a long time
8. Changes in technology	Customers adopted new technological products by replacing old ones
9. Changes in government regulations	Government policy changes in tariff and regulatory procedures
10. Changes in lifestyle	Changes in customers' consumptions patterns

Source Author analysis

**Table 4** Sources and methods for deriving information

Theme	Illustrative key findings
Observation visits to business and market areas	Regular visits to industrial and business areas such as industrial and market centres
Conversations with close friends and relatives	Consultations with family members and friends associated with business
Observation of successful products and services	Regular observation on successful products and services of other businesses
Conversations with potential customers	Informal interviews with potential customers about new products and problems in the existing products and services
Use of simple arithmetic	Use of simple calculation of business income and expenditure

Source Author analysis

*their brothers and the people who were doing their own businesses. They also discussed about the opportunity with their relatives and close friends. Some entrepreneurs noticed the opportunity when they travelled abroad. The entrepreneurs also did simple arithmetic to assess the opportunity.*

Table 4 indicated that entrepreneurs used social networks to derive information. They also used informal data collection methods such as visits, observation and conversation with different stakeholders.

### 4.3 Opportunity Discovery

Entrepreneurs attributed different types of knowledge, skills, experiences and business networks as main aspects to fit with opportunities. Entrepreneurs emphasized of having a *good knowledge on price ranges and corresponding quality products acceptable to customers*. Another entrepreneur stated that *he had thorough knowledge on how to run this business*. Similarly another entrepreneur had *knowledge about teaching, research, and ups and downs of the educational system, and how to satisfy students' expectations required to run a school and plus two college*. The entrepreneurs also attributed their own interest in the particular business to assess suitability of the opportunity, for example, *I have interest to work in educational field*. The knowledge was *gained while working in similar business organizations in the past*. The following statements indicated the contributions of experiences to gain the knowledge: *I had eight years of experience in marketing the products to the retail shops and I had been involved in different educational institutions in the past*. The knowledge was also gained through education programmes such as *Ph.D., Bachelor in Business Studies (BBS) and training and seminars programmes, books and websites*. In addition, the entrepreneurs also developed skills such as *customer handling skills during interactions with customers in the past works*.

Entrepreneurs also took *advantages of business network with suppliers for information about demand of the product category*. These networks were developed during their work in the past as indicated by; *while working as a Marketing Manager in previous firms, I already had good contacts and business relationship with a few schools, suppliers and tailor master who promised to help during business start-up*. Similarly, another entrepreneur stressed that *he could offer advertisement services to those clients whom he served while working in previous organization and he had a very good contact and relationship with them*. Some entrepreneurs developed resources deliberately to capture the recognized opportunity as stated in the following statements: *I developed a strong network with the Lahures (Ghurkhas in British army) other Nepali who returned from overseas as suppliers, and I also had a network of friends who were involved in retail fashion wears stores as customers. These connections made me easy to capture a huge share in fashion wear market*.

Other entrepreneurs stated that *his family had sufficient land to establish poultry farm*. Some entrepreneurs attributed personal quality as resources such as *I am kind of extrovert person, I have the capacity to influence and convince people, I was also hardworking and dedicated person because I used to work 19 h a day-from 4 am to receive the deliveries of suppliers to 11 pm to see the account of the daily transaction, I am a person of gentle nature. I am sociable and like to mingle with all people in a small talk, I do not discriminate among customers and try to be polite to everyone, and I do not lose my temper easily*.

In short, the experiences which contributed in development of relevant knowledge and skills, education and business networks were the resources considered as contributing factors to select (fit) business opportunities as evidenced by *my capacity and willingness ensured me that I was suitable for this particular business and I found myself capable of doing this business*.

Table 5 indicated that resources used to tap the opportunities were knowledge and skills gained in the past while working in other organizations as employees. Therefore, past experiences were considered to be the most important resources.

**Table 5** Resources to fit with business opportunities

Themes	Illustrative key findings
Interest	Personal interest in the chosen business
Knowledge	Knowledge of marketing and operation aspects
Experiences	Experiences gained in the past in previous work as employees
Skills	Skills to perform tasks of marketing and operation aspects
Personal quality	Perceived personal qualities such as capacity to influences and convince, hardworking, dedicated, polite and sociable
Education and training	Formal academic education and non-academic training programmes
Business networks	Relationship with suppliers, workers, and customers
Family supports	Supports from parents and other family members

Source Author analysis



In addition, social networks with business communities such as suppliers, workers, customers, parents and relatives were other resources. Besides, entrepreneurs also considered education and training, and personal quality as resources to tap the perceived opportunities at initial stage.

#### ***4.4 Creating New Fit Between Needs and Resources***

Creating new fit between needs and resources include redirecting, recombining and restructuring of resources and market as per emerging situation to create and retain successful businesses. The following structures elaborate the reasons for reshaping, activities involved in the process of reshaping and finally the outcome of the reshaping.

Reasons for creating new fit. Entrepreneurs create a new fit mainly because of changes in the market situation, human resources and changes in government policies. An entrepreneur changed the strategies *when the Government of Nepal announced a policy which restricted the import of fashion wear of more than three pieces of a particular fashion item (e.g. 3 shoes of any brand at a time). This policy created a huge shortage in the supplies and the business almost collapsed. The policy remained for about a year and many businesses closed down.* Similarly situation were changed in the cross-border market as an entrepreneur stated that *I found that the Indian shirting and suiting were costly, I set up a factory in Nepal and started producing shirting and suiting while importing the Indian cotton clothes. Then slowly I stopped importing the Indian cotton clothes and produced the similar cotton clothes in Nepal. It was cheaper to produce here and hence more profit.* Another entrepreneur changed strategies *when competitors imitated the business; he introduced full automatic cage system in the poultry business.* The other entrepreneur changed *business model at different times such as performing tele-marketing business, home shopping and finally online shopping to meet the changing needs of the customers.* Some entrepreneurs changed business system when they faced problems with the existing human resources *such as the sales team who were compensated with commission in the initial days left us after gaining adequate knowledge and experiences and started their own businesses.*

Table 6 specified mainly three reasons for reshaping, remoulding and adjustments of opportunities and resources and teams, i.e. new fit and balance. They are shifted in government policies, competitive structure, social changes relating market needs and international trade practices.

Business strategies used. The business strategies used for creating the new fits consisted of implementation of broader strategies such as innovation, business diversification and market expansion, marketing strategies, human resources strategies, supply chain management and business lobbying. They diversified into new business line such as *in order to stay competitive we diversified into new business lines. We started feed factory and hatchery to gain cost advantage against the competitors.* Similarly, *since the competition became stiffer, we had shifted our*

**Table 6** Reasons for Reshaping Resources and Market

Themes	Illustrative key findings
Government policy shift	Government changed policy on imposing tariffs, regulating business practices
Competition	Emergence of competitors and their strategies
International trade practice	Changes in international business and their practices
Changes in market needs	Customers change their consumptions habits

Source Author analysis

attention to retail market. We had a retail showroom. They also introduced new products and marketing programmes after a study on market changes. New marketing strategies were also developed such as they were also able to make people aware about our brand name “scoop”. They also advertised their products in print ads in magazine, radio and TV jingles in popular media. They also used customers’ relationship such as during the currency devaluation I convinced the customers as well as the dealers in India. Some entrepreneurs modified supply chain system such as our business removed the intermediaries such as retailers and wholesalers by importing the products directly from China and India, and delivered products directly to final customers at their premises. Other entrepreneur improved human resource management by recruiting new sales people, and training them and compensating them with fixed salary plus commission, profit sharing and bonus for crossing sales limits. Some entrepreneurs also sourced human resourced from neighbouring countries such as visited India (Baharaich) to locate skilled and trained labourers. Business lobbying was other strategies used such as they requested Department of Drug Administration and government to make high security in the border area to stop illegal imports and security provisions during political strikes and disturbances. They also requested local body of Federation of Nepalese Chamber of Commerce to overcome the issue of unhealthy competition.

Table 7 mentioned different strategies used to create new fit and balances. They are in the marketing in which they convinced customers, launched advertisements, diversified into new business lines, expanded into new markets, promoted brands and modified their products. Similarly, they indulged into lobbying activities with government agencies and business associations. They also adjusted their supply chain systems and human resource management system.

Outcome of the strategy implementation. Broadly two categories of achievements were reported: cost advantage such as able to quote a competitive price to customers. Other achievements were uniqueness in terms of inimitable operation system such as since this system required huge investment, competitors could not imitate us quickly. When competitors imitated us, we introduced full automatic cage system. Other achievement was improved service quality such as they hired ex medical representatives who had good communication skills and contacts. Therefore we were able to provide quality services to the customers. Finally, other

**Table 7** Strategies adopted to develop business opportunity

Themes	Illustrative key findings
Changed products	Added new product lines
Promoted brand	Promoted brand name through different marketing strategies
Shifted attention to new market	Added new geographic locations and new customer segments
Advertised products	Launched different promotion and advertisement in media
Convinced customers	Convinced intermediate customers about the business reality
Diversified into new business lines	Added different business lines relating to previous business
Team mobilization	Used team of human resources to solve problems
Recruited new sales people and train them, compensate	Recruited human resources and changed compensation systems
Visited foreign countries to hire skilled labourer	Visited foreign countries to recruit skilled labourers to improve production practices
Adjusted supply chain	Changed suppliers' and their destinations
Requested government agencies	Lobbied government organizations to ease business regulations and competition practices
Requested business associations	Lobbied business associations to address unfair competitions
Studied many book	Studied different books pertinent to business practices

Source Author analysis

achievement was improved goodwill among suppliers as stated by an entrepreneur that *they were rescued by raw materials suppliers' credit facility and the bank's lending. At that time, I realized the importance of goodwill and credibility among suppliers for doing business in hard times.*

Table 8 indicated that entrepreneurs achieved improvements in the business through the readjustments. The outcomes were safeguarding from the following: political disturbance, changes in government policy and enhanced competitiveness. They also improved relationship with the suppliers. The statements indicated that opportunity creation is a dynamic and continuous process in which different strategies were used to create fit between resources and market opportunities. Several situations emerged which distort the match between resources and market needs. These changes were in different forms: government policies regarding tariffs, wage rates, import restrictions, competitions, international trade practice, political turmoil and changes in life style, etc. The entrepreneurs came up with marketing strategies such as new products, advertisements, market development, brand management, relationship and lobbying government agencies and business associations. Resources mismatch was addressed by the adjustments in supply chain,

**Table 8** Outcome of the strategic implementations

Themes	Illustrative key findings
To quote a competitive price	To lower price against competitors price
To prevent effects from imitations by competitors	To protect from the effects of competitors who brought out the same products and services
To create goodwill and credibility among suppliers for difficult times	To build credibility among the stakeholders
To be competitive	To strengthen competitive strengths
To safeguard from effects from policy changes such as tariffs, wage rates and import restrictions	To safeguard and rescue from the effects of policy changes
To safeguard from effects from political uncertainty and disturbance	To safeguard and rescue from the effect of political turbulence in the market

*Source* Author analysis

human resource management, sourcing of raw materials, credit management and improvement in business networks. The opportunity creation is found to be non-stop affairs in the business.

## 5 Discussion

This study explored on how entrepreneurs recognize and develop opportunities in continuous basis to address the research gaps of not knowing and inconsistency in the research findings on entrepreneurial opportunity recognition and development process. By studying cases of 31 entrepreneurs, a process of opportunity recognition and creation has been identified in this research study.

### 5.1 *Inspiration for Particular Business Ideas*

The study indicated eight factors as inspirations to start a particular business. The first step is a decision to start a business for opportunity recognition process to take place (Christensen and Peterson 1990; Bhawe 1994). The inspiring sources are personal desire and interest on business and social welfare. They were also inspired by family and business partners. Some people discovered their inspiration while searching for a business idea and on the contrary some stumble into the idea through causality. Besides, the entrepreneurs also discovered customers' problems that need to be solved as starting point for opportunity recognition, for example,

self-experienced problems with products as customers and experiences in working with the products as employees in the past (Hill and Singh 2004). Nevertheless, the opportunity recognition starts with inspiration on a particular business idea before initiations are taken for entrepreneurship.

## ***5.2 Opportunity Recognition***

Once entrepreneurs are inspired to start a particular business, they start the process of recognizing the idea as opportunity to convert them into a profitable venture (Christensen, Madsen and Peterson 1994; Ardichvili et al 2003). This study indicated that entrepreneurs captured different clues to see the pattern which supported the fact that they are alert and sensitive towards clues to see the changes (Baron 2007). As results of such alertness, they recognize what customers have been complaining about the products and services (Bhave 1994). The other demand-side clues are observations of growing customers' demands of products while working in the past organizations and changes in life styles of customers. In supply side, they found out the supply constraints in the market, changes in government regulations and uses of technologies. They also notice the operational aspects of business such as the cost and selling prices of products and services, trade and business situations in other countries. These findings indicate that entrepreneurs are indeed sensitive towards new patterns generated from trends and events (Gaglio and Taubs 1992; Baron 2007).

The entrepreneurs used different sources of information to recognize and validate the clues for business opportunity recognitions. They carry out detail conversation with friends and relatives, and potential customers. They also use informal data collection methods such as visits and observations of successful products and services, business organizations and market areas. They use simple calculation to see whether the business ideas are really opportunity. These findings are in contrast to noticing business idea without search (Kirzner 1979) and intuitive opportunity recognition (Hills 1995). These findings rather support that entrepreneurs exercise their ability to sense and act (Haynie et al. 2010) in information search and opportunity recognition process (Long and McMullean 1984; Kaishand Gilad 1991; Shane and Eckhardt 2003).

## ***5.3 Discovery of Opportunity***

It is obvious that entrepreneurs once perceive opportunities they evaluate them whether they can implement with their resources which is considered as recognition or discovery of a fit (Ardichvili et al 2003). This study indicated that specified

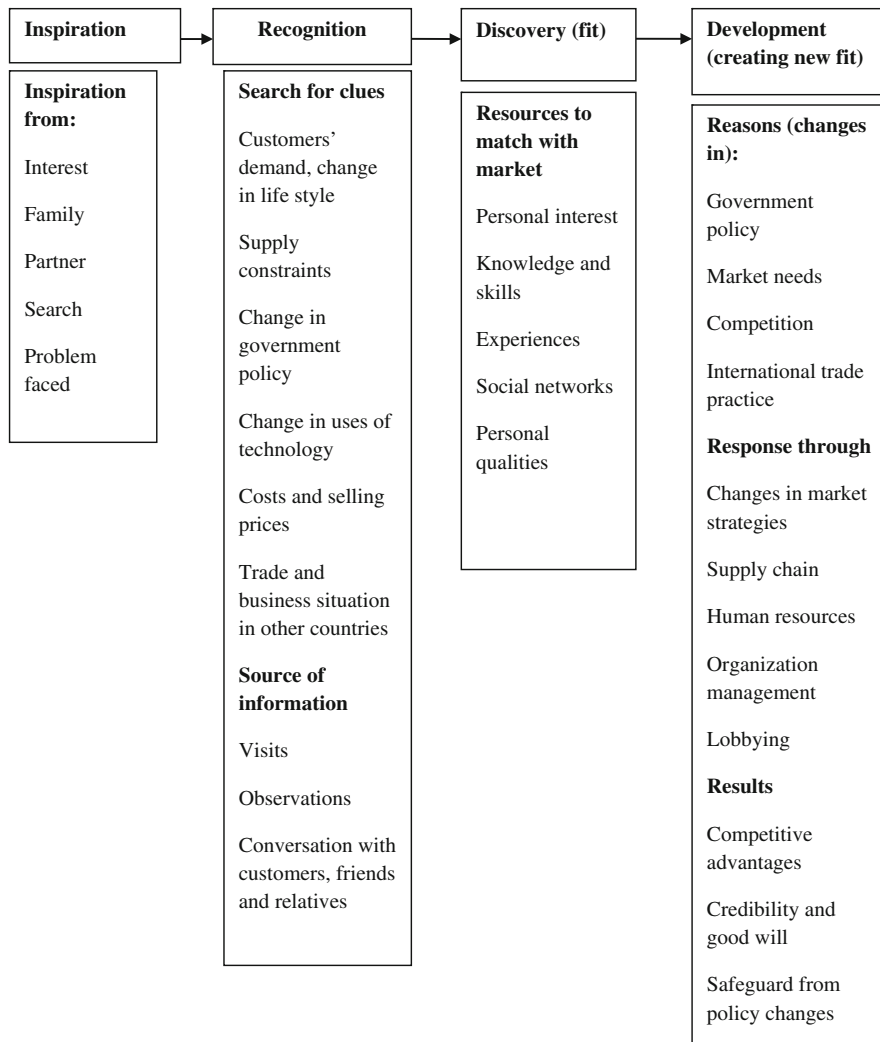
resources used to tap the opportunities were personal interest in the specific business. Similarly knowledge and skills about market (Gaglio 1997; Christensen and Peterson 1990) and operation aspects of the specified business are the most prominent resources. Experiences while working in the past employer organizations are the most important resources to develop interest, knowledge and skills (Shane 2000; Ardichvili, Cardoza, and Ray 2003; Hills and Singh 2004; Vesper 1996; Bygrave 1997; Kakati 2003). In addition, social networks and relationship with business communities such as suppliers, workers and customers and supports of parents and relatives were other resources (Aldrich and Zimmer 1986; Uzziand Spiro 2005; Stuart and Ding 2006; Stuart and Sorenson 2007). In addition, entrepreneurs also considered knowledge gained in the formal academic education and non-academic training programmes are also useful resources. Finally, the personal quality such as capacity to influence others, hardworking and politeness was also considered resources to develop fit with the opportunities.

#### ***5.4 Creating New Fit Between Needs and Resources***

This study indicates the iterative process of creating and developing business opportunities with continuous evaluation and re-evaluation and adjustments according to market needs and resources requirements by entrepreneurs. The entrepreneurs continuously face the challenges from emerging business environment urging them to create new fits. The changes are in government policy, market needs, competition and international trade practices. The entrepreneurs developed opportunities continuously by tracking these four types of changes.

Consequently, the entrepreneurs make adjustments to tap emerging market needs and adjust resources according to the needs in different ways. The main market strategies appeared to be diversification into new businesses, market development, adding new product lines, brand promotion and advertisement, improved sales force management and customer relationship. Other strategies relating to resources are on adjustments in supply chain management, human resource and organization management. Some entrepreneurs increased their capacity by studying pertinent books and visiting different countries. Lobbying government organizations and business associations are other popular strategies of the entrepreneurs to ease policy, regulatory and competitive challenges. The entrepreneurs react to the market and resource needs and develop emergent strategies. They learn from uncertain environment, exploit changes as opportunities and make adjustments in market and resources. Therefore, business opportunity recognition alone is not sufficient. Opportunity creation and development is a continuous non-stop affair of entrepreneurs (Timmon and Spinelli 2009; Alvarez and Barney 2007). By creating new fits, the entrepreneurs' increased competitive edge by enabling themselves to quote

competitive price and impede imitations. They also improve credibility and goodwill among suppliers. Other achievements are ability to safeguard from the effects of policy changes and political uncertainty in the business. The model of business opportunity recognition, discovery and development is summarized in Fig. 1.



**Fig. 1** Model of business opportunity recognition, discovery and development. *Source* Author analysis

## 6 Conclusions and Scope for Further Research

This study provides valuable insights into entrepreneurs and researchers about the opportunity recognition and development practices followed by Nepalese entrepreneurs. Successful Nepalese entrepreneurs did not use accidental, simplistic and trial-and-error approach in recognizing the business opportunities, but they rather used sophisticated models during business start-up and while driving the businesses to be successful. It can be concluded from this study that the entrepreneurs discover problems to address needs to be fulfilled rather than beginning by looking for opportunities, filtering them and messaging the ideas and elaborating them. The steps they followed indicated that opportunity recognition requires a set of skills for sensing markets and assessing them.

These findings have several implications for education and training in the context of entrepreneurship development. Since the inspiration to start a particular business is the first step of opportunity recognition, an entrepreneurship education programme should either select those students who are already inspired to do so or structure the programme to inspire them. The students also need to be made alert to watch for changes in market and business environment through field observations and interactions. Students who have gained experience in their chosen line of business and have developed relevant business networks should be enrolled in the programme in order to strengthen venture creation. In addition, the programme should provide sufficient opportunities to the students to gain experience and develop their networks during its course.

Similarly, a prospective entrepreneur who wants to start an enterprise should be alert regarding market information and the resources required for his/her business ideas in order to generate appropriate business. Entrepreneurs should decide to begin a particular venture in line with their knowledge, skills and networks gained through their past experiences. Since venture creation does not stop after start-up, entrepreneurs should continuously monitor the changes in the market and business environment in order to develop and implement suitable strategies to gain competitive advantage.

This research study used an exploratory approach in which in-depth case studies were done based on interviews of entrepreneurs and a model was proposed. The research method used was appropriate given the lack of research on the topic, but has limitations in terms of generalizability. Despite these limitations, this study provides valuable insights and suggests for future research. Researchers could build on the themes in order to develop survey instruments and conduct survey research with large samples and perform more quantitative data analysis.



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## Chapter 20

# Government and Institutions' Role in Promoting Micro-Enterprises: A Study among Handicraft Entrepreneurs in Dimapur District, Nagaland

Imtinungsang Jamir and P. Sridharan

**Abstract** This paper discusses about the initiatives taken by the local government and institutions for innovating entrepreneurship in Dimapur district, Nagaland. A conceptual framework is constructed based on the previous empirical research findings and considered several key factors to analyze, by questioning the effectiveness of regional institutions and government's initiatives towards promoting entrepreneurship. The objective of the study is to confer the initiatives taken by various organizations towards promoting entrepreneurship and to understand the impact of training and skill development programmes among the entrepreneurs. The study is also designed to identify the problems faced by the entrepreneurs. Marketing and financial assistances from the local government and banks are also discussed later in the paper. The primary data were collected through self-administered mail survey from the bamboo and wood handicraft entrepreneurs based on five-point Likert scale questions. The result indicated that there is a significant difference on the impact of training programmes on entrepreneurs. Moreover, access to finance, market information and technological setback was the major problem faced by entrepreneurs, irrespective of the business experience. The study also recommends the handicraft entrepreneurs to open a bank account in the business name to avail overdraft facilities.

**Keywords** Government intervention · Micro-enterprises · Handicraft entrepreneurs · Problems · Nagaland

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## 1 Introduction

Over the last two decades, a great deal of attention and interest has been paid to the subject of entrepreneurship. Many folks in our society chose entrepreneurial careers due to its advantages of offering greater economic and psychological rewards rather than larger company does. There are several programmes that are offered by the government which strive to identify potential entrepreneurs from the large group of educated unemployed, but despite all the attention and discussion paid to this issue, the core fundamental question remains unanswered; what does entrepreneurship really mean?

Undertaking an enterprise is thus entrepreneurship, and the one who undertakes it and who combines capital and labour for the purpose of production is an entrepreneur (Jain and Varshney 1993). An entrepreneur is an individual who is willing to take financial risks and undertakes new financial ventures. The word “entrepreneur” is derived from the French word “entreprendre” means “to undertake”. In the early sixteenth century, men who engaged in leading military expedition were referred to as entrepreneur, such as army leader (Balu 2004). In seventeenth century, it was extended to civil engineering. Cantillon (1755), French economist, defined entrepreneur as a person or dealer who pays certain prices for a product and resells them at uncertain prices in the future.

In an active business revolution, entrepreneurship plays an important role. Entrepreneurs drive economic change (Sharif 2012). They are the economic agents who play a vital role in the economic development of a country by identifying the opportunities and seize them for economic benefits. According to Global Entrepreneurship Monitor, entrepreneurs account to two-third of all the innovation by acting as change agent; discovering and inventing new products by creating new combinations of resources.

With Nagaland as the background of this study and Dimapur district in particular, this paper aims to address various questions: How does the government and institutions promote and facilitate innovative entrepreneurship effectively? Does the training programmes provided by the various regional institutions to develop entrepreneurship is effective? What are the major problems faced by the entrepreneurs? If this is the case, policy makers can select from a broad range of approaches, from top-down government interventions to long-term cultivation of entrepreneurship culture, etc. In this field, government can bring solution by initiating certain measures which can overcome obstacles that hinder innovative entrepreneurship.

The paper is organized as follows: Sect. 2 talks about the conceptual framework and theoretical justification of the paper. This includes the importance of the study and how the previous literature justifies the problem and appropriateness of taking this study. Section 3 discusses about the review of the literature on previous studies emphasizing mainly on the government and institutional training and skill development programmes. Sections 4 and 5 are objectives and methodology of the study. Section 6 elicits about the entrepreneurship development in Nagaland state. Section 7 speaks about the role of government and institutions in promoting

entrepreneurship in Nagaland. Sections 8 and 9 discuss about analyses and findings. Section 10: suggestions and Sect. 11: conclusions, limitations and scope for further research, respectively.

## 2 Conceptual Framework and Theoretical Justification

The conceptual framework for this paper analyses the role of government support and initiatives for the development of entrepreneurship in Nagaland. There are certain sectoral obstacles that discourage entrepreneurs from achieving competitive advantages in the market. Entrepreneurship Development Programmes (EDPs) are to impart entrepreneurial skills and knowledge among the people through various structured training programmes. Nagaland state in general and Dimapur district in particular require a continuous support of funds and other marketing assistances from the government not only for setting the business but also for meeting other operations such as regular upgradation of machinery and maintenance. To meet these requirements, the government undertakes several steps by setting up regional banks and other financial institutions by formulating various schemes and policies. When all these measures are specifically focused towards support and development of small and medium enterprises, many entrepreneurs still remain untouched from these benefits especially in the rural region due to the lack of ideas, information and awareness etc.

Promotion of entrepreneurship was drafted and emphasized from the Third Five-year Plan as a force to fight against the poverty. Its measure was to develop rural and urban areas and the development of small industries in the villages so as to encourage small-scale entrepreneurship. In the recent years, the need for skilled entrepreneurs is growing high but it requires a major improvement in developing and upgrading their skills by enhancing them through training and development programmes. It is believed that the government and institutions are doing their best but what we find in all cases is the problems relating to economic factor. Dealing with financial matter is the major concern among the entrepreneurs in the state where the availability of bank credit is very limited. Lack of institutional arrangement for mobilizing financial resources still remains major concern.

Previous studies suggested that entrepreneurs face the major problem in obtaining start-up capital where financial institutions are reluctant in granting credit facilities. Chander and Arora (2013) found out that inadequate broadcasting of information and knowledge and shortage of finance are the major problems faced by the entrepreneurs. While Jamir and Natarajan (2014) concluded that, entrepreneurs seem to have some common problems among them with regard to the marketing of bamboo handicraft products such as lack of market information, inadequate market finance, price fluctuation and absence of grading and processing are the major problems.

It is believed that competition is high for the indigenous products in the local as well as domestic market but what more threatful is the competition from Chinese and Myanmarese products having better design and cheaper price tags. It is also

obvious that government and financial institutions are training and developing the entrepreneurs by providing financial assistance and incentives as well as tools and machinery (Natarajan and Jamir 2013) but the problem still continues to grow in this sector, and though government provides fiscal and monetary incentives, this sector also suffers from lack of modern technology and skilled labour, inadequate bank credit and an insufficient marketing network (Jamir 2014). Therefore, it is to be given more importance to skill development, technical and training education, etc. to generate mass employment opportunities which will help especially those living in rural areas.

### 3 Review of Literature

Entrepreneurship development has been accepted as a tool in the developmental process for the last three decades in India. The development process is now at the crossroad, and therefore, policy makers, bankers and bureaucrats are beginning to question the effectiveness and the need of training and development programmes. It is observed (Jogi 1999) that 31% of the entrepreneurs in North Eastern Region (NER) who have set up their industries have gone for the enterprises in the category of textile/handloom/handicraft/Woolen products/leather products, etc. followed by agro-based industries and trade groups. Mony (1999) suggested that mere establishment of enterprise does not mean that an entrepreneur is well developed. The entrepreneurs need to rely on government and financial institutions to help them improve their success rate. When the financial institution continues to strengthening the entrepreneurship, it is also felt that some EDPs need reorientation so as to make it more industry specific (Andrews 1999).

Private industrialists can get encouragement from government assistance in undertaking new projects which automatically reduces the risk they face. Thus, government assistance in any form enables the learning process to continue without being subject to diminishing return (Kim et al. 1995). The role of governmental assistance has been given less importance in the endogenous growth theory literature. In fact, if we look at the big exporters or industries from the most successful economies in East Asia, it is because of the continuous and extensive support of government that rapid growth of industrialization occurs.

The experience of the training underscores the fact that the bond of trust and personal relationship between the trainer and the trainee is formed after the training, and if maintained well, it is useful to both the parties. The mutuality nourishes the bonds and motivates for the same follow-up support by the trainer, thus supplementing the efforts of developmental agencies instead of being a substitute for the same (Mishra 1999). The EDPs organized by National Institute of Small Industry Extension Training (NISIET) emphasize only to planning and implementation, and evaluation has not been taken so seriously. Therefore, these aspects need proper care for improving the success rate of the EDPs that are conducted by the institutions (Mali and Deka 1999) because entrepreneurship education and training do make a

positive contribution to the entrepreneurs who create job and alleviate poverty in the society. It is also observed that government is very much keen towards the development of Micro, Small and Medium Enterprise (MSME) by bringing out suitable promotional measures and policies schemes such as incentives schemes for business upgradation, concession on excise duty and supportive technical services.

Moreover, when it comes to barriers among the entrepreneurs, economic factor is the major concern. Being stably successful is a common problem among entrepreneurs anywhere and everywhere. A cross national study by Eriobunah and Nosakhase (2013) suggested that access to finance, political stability, technological set back, marketing problems and infrastructural issues were the major problems for the development of business enterprises in Nigeria whereas not making huge profits due to the high tax rate was the only problem faced by the entrepreneurs in Sweden. The problems vary among different countries depending upon the geographical, political and economic factors. Khatoon (2012) suggested that problems of industries whether in small-scale sector or in organized sector are almost identical. The internal problems that the entrepreneurs face are related to finance, raw materials, managerial skills, labour, marketing, quality, technology and sickness.

Information on enterprises set up by the NISIET-trained entrepreneurs revealed that about 56.6% of the entrepreneurs have set up their enterprises from their own resources (Jogi 1999). Many previous studies have suggested that entrepreneurs face major problem in obtaining start-up capital where financial institutions are reluctant in granting credit facilities. This fact shows that finance is the bottleneck in setting up the enterprises in the NER. Therefore, to ensure success in EDPs, financial institutions, particularly Industrial Development Bank of India (IDBI) and state government, will have to re-look to ensure timely availability of finance to the potential entrepreneurs. Chander and Arora (2013) found out that inadequate broadcasting of information and knowledge and shortage of finance are the major problems faced by the entrepreneurs. Moreover, Jamir and Natarajan (2014) concluded that, lack of market information, inadequate market finance, price fluctuation and absence of grading and processing are some of the common problems faced among entrepreneurs.

#### **4 Objectives of the Study**

- (a) To understand how government and institutions promote entrepreneurship in Nagaland.
- (b) To study the impact of entrepreneurs' demographic profile on business profitability and to identify the problems faced by the entrepreneurs.
- (c) To analyse the impact of training and development programmes on entrepreneurs.
- (d) To identify entrepreneurs' sources of funding and marketing assistance provided by the banks and local government.

## **5 Methodology**

### **5.1 Research Design**

The setting of the study is Dimapur district, Nagaland, where the subject of the study was explored through mail survey. The study followed self-administered mail survey method. The target population of the study are bamboo and wood handicraft entrepreneurs. The questionnaire consists of four blocks. The first block of questions consists of demographic variables such as age, education, experience, monthly turnover and source of capital. The second block consists of questions on impact of entrepreneurship training and development programmes on entrepreneurs, and these questions were asked on five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The third block of questions were on marketing assistance provided by the banks and various financial institutions which were also asked on five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The fourth block of question was on problems faced by the entrepreneurs. These were ranking questions where the entrepreneurs were asked to rank each problem from 1 to 5 (1 = Not at all important to 5 = Most important).

### **5.2 Sampling and Data Collection**

The sample consists of only bamboo and wood handicraft entrepreneurs. The researcher has chosen Dimapur district as the study area because it is an important trade and commercial centre in Nagaland. Having finalized the questionnaire, self-administered mail survey was adopted to gather data (Ahmed et al. 2002; Oyeniyi 2009) from the respondents.

The next step was to determine the sample size, as the researcher was interested only on bamboo and wood handicraft entrepreneurs in and around the Dimapur district, and the questionnaire was mailed to the 50 entrepreneurs followed by a telephone call after a week. The rate of response was acceptable at 72% (36 questionnaires out of a sample of 50 were returned). It should be acknowledged that the sample size is normal for the study from this particular region because the sector is unorganized and there is no proper statistical record and only handful of handicraft entrepreneurs were reachable due to time limitation. The mail consists of a questionnaire, covering letter and a self-addressed envelope.

## **6 Entrepreneurship Expansion in Nagaland**

Entrepreneurship constitutes an important input in the process of economic development. The state is rich in natural resources where agriculture is the mainstay of the people. In spite of rich resources, the state lags behind in the field of



industrial development from rest of the country. The development of small-scale industries (SSIs) remains at a very promising stage though high incidence of industrial sickness is reported among the SSIs.

During the last two decades, significant development has taken place where most of the states in the NER have come out with the industrial policy. Although the literacy rate in the state is high, the state still lacks in the skilled manpower. In the recent years, this scenario is changing but it requires a major improvement to develop and upgrade the skills of the young generation by utilizing and enhancing the skills and services through training and development programmes provided by the local government and non-governmental organizations (NGOs). A number of incentives are being offered to induce and motivate entrepreneurs to take up enterprise. It is sometimes understood that non-democratic governments perform much successful in understanding the power of capitalism such as in Singapore, China and Vietnam.

The growth of entrepreneurship relies on the social, economic, political and psychological factors. In Nagaland, however, economic factor is the major concern where capital formation is very limited. On the other hand, restriction of having property ownership for the non-local resident limits to the availability of bank credits to them. Private funding remains unrealistic due to the high interest rate. Labour also remains as a principal economic cost that affects the entrepreneurship due to the limitation of skilled labour.

The Small Industries Service Institute (SISI) and the North Eastern Industrial Consultants Limited (NECON) have been conducting EDPs in an effort to build the capacity of the people in the state. Crafting, weaving, carpentry, tailoring, bakery, printing press, steel fabrication, communication services and automobile repairing are some of the major area of self-employment showed after the programmes (Nagaland State Human Development Report 2004). However, lack of institutional arrangements for mobilizing financial resources still remains major constraints as per the participating entrepreneurs. The statistic shows low success rate of EDPs in the state as compared to regional average, and this can be due to the one reason where most participants were first-generation entrepreneurs.

## **7 Promoting Entrepreneurship in Nagaland**

### ***7.1 Role of Government***

The role of government in every society is to encourage and promote entrepreneurship among its people. It is an absolute support by the government for the concern of the future economic growth in any part of the region or country. In 1981–1982, Nagaland had only 305 small-scale industries, and this was gradually increased to 1360 in 2000–2001. As per the Statistical Handbook of Nagaland (2013), there are 760 MSMEs and 1114 SSIs, who are permanently registered, and 109 unregistered SSIs. The distribution of SSI units is, however, uneven. Among all the districts in Nagaland, Dimapur district has got the largest number of SSIs

followed by Mokokchung. The main reason why the distribution of SSIs in other districts is very thin is because of lack of communication infrastructure, lack of trained personnel, inadequate raw material, high overhead costs and limited service supports (Nagaland State Human Development Report 2004).

This sector faces poor working environment, inadequate tools and machines added with difficulty to connect with market that makes the local businessman unable to support themselves at times. These people are dispersed; they are not organized and are individually marketing their products. They also have very limited knowledge on the range of products and product design due to lack of exposure and marketing avenues. Today, faced with competition from industrially produced goods which are usually better design with cheaper price tag, the artisans are giving up their unique crafts (Amongla 2012). The artisans need to tune their talents by developing the products in accordance with the demand of the market.

The Nagaland government in collaboration with the YouthNet, a non-governmental organization (NGO), has launched “Impact 5000 by 18” a five-year campaign on entrepreneurship and employment with an aim to promote entrepreneurship among the youth with their target to produce 5000 young and skilled entrepreneurs by the next five years. Which is quite similar to back then in 1985, when the North Eastern Council (NEC) initiated a comprehensive EDPs in collaboration with the IDBI and has set up a target of 1000 entrepreneurs per year for the Seventh Five-Year Plan period (1985–1990). The Entrepreneurs Association (EA) of Nagaland also releases “Dream Loan” from EACM Seed Fund for assisting beneficiary entrepreneurs (Jamir 2014).

With the launch of campaign “Impact 5000 by 18”, Nagaland government along with the Department of Youth Resources and Sports creates opportunities of entrepreneurship among the Naga youths. The campaign also hold a contest by the title called “The Entrepreneurs” where the best entrepreneurs will be chosen among the aspirants in which the programme is designed to enhance business skills of 20 select young entrepreneurs who undergoes a rigorous training programme from classroom lecture, group activities, individual project development to case study discussions (Mirror 2013). This campaign has enhanced the training programme to the entrepreneurs where 5-week course is taught by some of the country’s imminent entrepreneurship experts.

“Linking budding entrepreneurs with the government schemes and markets”, a workshop organized by the Associated Chamber of Commerce and Industry (ASSOCHAM) of India in the state capital Kohima, also helped the young entrepreneurs in dwelling concept on the public–private partnership (PPP). Such workshop encourages the people from every corner of the state as well as neighbouring region to invest in the industry, agriculture and every aspect of developmental activity. Entrepreneurship is yet to be taken seriously (ToI 2011) while agriculture remains the major occupation in the state comprising up to 80–85%. Lack of adequate infrastructure, phobia of law and order are among the few challenges that limit the investment from private sector in the state.

The District Industries Centre (DIC) also plays a major role in promoting and developing SSIs and Tiny Sector Industries in the state. The government is giving

more importance in strengthening the DICs with training and development facilities among its staffs and officers. This helps to maintain the pace and pattern among the staffs by adapting to latest technology and skills. The DICs in the state act as a principal agency to guide the entrepreneurs in setting up industries, project preparation and arrangement of finance.

Therefore, it is an important juncture for the urgency of need and development of sharper, stronger and healthier private sector by pursuing smart and talented young entrepreneurs in the state. Study revealed that the current ongoing programmes launched by the YouthNet are initiating various programmes for training and educating potential people in the various sectors such as piggery, carpentry, handloom and handicrafts. But the constraints arrive while expressing the financial concern because availing bank loans becomes a complication (Mirror 2013); therefore, the YouthNet is anticipating to make the funds available easier for the promising entrepreneurs by intervention with government towards formulating policy.

## ***7.2 Role of Institutions***

The role and responsibilities of training institute can be seen in terms of implementation of ideas, policies and programmes. Training institute is expected to act as a link between the sponsoring organization and the participants in fulfilment of objectives laid down by the organization. The entrepreneurship training in particular is mainly geared and performed by the training institutions. Till date, Indian Institute of Entrepreneurship (IIE) has trained more than 145,508 participants and has organized 4312 programmes since its initial operation from 1994.

As shown in Table 1, the number of programmes and participants are increasing year after year. During the period 2012–2013, the number of training programmes conducted was increased by 79.26% (1461), and the participants trained increased by 66.6% (44287) where as many as 1750 participants were from Nagaland.

On the other hand, North Eastern Industrial and Technical Consultancy Organization Limited (NEITCO) also plays a vital role in conducting training and skill development for youths. It is an organization set up by the financial institutions (SIDBI, ICICI, IFCI, SBI, UCO Bank, etc.) to provide complete services and other consultancy assistance to tiny, cottage, small- and medium-scale industries in the region. The table below (Table 2) shows the details of training on dress making and fashion designing conducted by the institute belonging for the north-eastern states.

## ***7.3 Role of Nagaland Bamboo Development Agency***

The Nagaland Bamboo Development Agency (NBDA) was established in 2005 with the onus to undertake bamboo development in Nagaland both as a resource

**Table 1** Programmes conducted at IIE in the last 3 years

Programmes	2010–2011		2011–2012		2012–2013	
	Number of programmes	Number of participants	Number of programmes	Number of participants	Number of programmes	Number of participants
Entrepreneurship Development Programmes (EDPs)	121	3,246	91	2,839	17	463
Entrepreneurship and Skill Development Programmes (ESDPs)	350	9,393	625	17,983	1,348	39,575
Management Development Programmes (MDPs)	20	568	10	234	19	624
Other programmes	65	3,630	89	5,528	77	3,625
Total	556	16,837	815	26,584	1,461	44,287

Source: Indian Institute of Entrepreneurship, Annual Report 2012–2013

**Table 2** Skill development training conducted by NEITCO during May 2013–January 2014

S. No.	States	No. of trainees trained	No. of trainees successfully completed training
1	Assam	33	33
2	Arunachal Pradesh	5	5
3	Manipur	7	6
4	Meghalaya	13	12
5	Mizoram	9	9
6	Nagaland	8	8
7	Tripura	5	5
	Total	80	78

*Source* Status report on skill development training, NEITCO

and as an enterprise. Development of “bamboo as enterprises” intends to evolve policies and action plans that resolve focus on the following aspects:

- A. Promote bamboo-based industries:
  1. Food products.
  2. Medicinal, chemical products and alcohol beverages.
  3. Craft, handicraft and art products.
  4. Value-added products and wood substitutes such as ply, flooring tiles and shuttering.
- B. Create awareness of the uses and value of bamboo by imparting training, seminar, workshop, etc.
- C. Promotion of bamboo in structural application.
- D. Promote and develop traditional usage of bamboo.

With these objectives, the agency has undertaken several artisans to work under them with an aim of providing them a better platform (Jamir and Sridharan 2014). This agency has taken up several initiatives for the development of bamboo as an enterprise through assistance from National Mission on Bamboo Application (NMBA). Marketing channels are also been established for bamboo products such as bamboo mats, bamboo incense sticks, bamboo venetian blinds sticks, bamboo charcoal, bamboo charcoal briquette, bamboo shoot, bamboo roads, bamboo bazaars and retail outlets.

One of the NBDA's focus area is revitalizing and promoting the local traditional craft and art, revitalizing bamboo handicraft for improving the livelihood of artisan community in the state through improved technology and design and value addition for export. Part of the tradition of the people, bamboo handicraft is an important source of livelihood especially in the rural areas where most of the artisans are neither educated nor employed, their skills passed on from generation to generation through practice.

The NBDA, assisted by its officials and the Village Bamboo Development Committee (VBDC) and other institution like the DIC, identifies the artisans in all

districts. This facilitates their participation in training that aimed to improve their skills and enhance their earning capacity. To upgrade their skills on design development, a 1-week hands-on training on product design and development is conducted annually.

Assistance is also given in the form of tools and machineries. Artisans are further assisted in establishing retail outlet in various outlets in various locations in the districts. NBDA has established a bamboo handicraft emporium-cum-consignment and sale depot at Nagaland Bamboo Resource Centre (NBRC). This facilitates a single-point marketing interface for the craftsmen and self-help groups (SHGs) as well as the customers, both national and international. It also plans to setup an online trading site in the immediate future where the handicraft product would be codified and advertised through the marketing portals of NMBA and the Cane and Bamboo Technology Center (CBTC).

Seeking more employment opportunities through bamboo handicraft units, the NBDA trains unemployed youths. Meanwhile, exposure trips for artisans and entrepreneurs are also organized to places such as UK, China, Vietnam, Philippines, Indonesia and Kerala in India. They are also supported to participate in trade fair and exhibition such as the North East Trade Fair, International Trade Fair in New Delhi and Annual Hornbill International Festival of Nagaland. Their products are also presented in exhibition such as the North East Agri-Expo in Dimapur and the Flanders Expo in Belgium, allowing them to link up directly with the buyers.

#### ***7.4 Approaches Through Projects***

With an increase in globalization and liberalization and the changes of government and policies, it has become important to think and focus attention towards the indigenous products. It is observed that group approach for development of MSME is in the need and IIE has come forward by implementing various approaches in projects in the NER. This approach is towards developing enterprises and entrepreneurship in project mode in different parts of the region where geographical proximity forms the advantages in selecting the trade and beneficiaries. As mentioned earlier, while continuing the old projects, there are various new projects that the institute has approached during the year 2012–2013 such as, (a) Science and Technology Enterprise Development (STED) Project; (b) Rural Industries Programme (RIP); (c) Regional Resource Center (RRC) on Cluster Development; (d) Rural Business Hubs (RBH).

The Rural Industries Programme (Table 3) which is supported by Small Industrial Development Bank of India (SIDBI) aims at introducing 100 micro-enterprises in the span of 5 years' time from some of the backward districts in the NER. The two RIPs completed in 2012–2013 were in Dimapur district, Nagaland and Champhai district, Mizoram.

The Industries and Commerce Department, Government of Nagaland, has already signed a MoU with Indian Institute of Entrepreneurship for renting a land to

**Table 3** Towns where rural Industries programme have been launched

S. No.	Rural industries programme	Units launched	Bank financed	Self-financed
1	RIP in Dimapur district of Nagaland	100	90	10
2	RIP in Champhai district of Mizoram	75	57	18

Source Indian Institute of Entrepreneurship, Annual Report 2012–2013

allocate the IIE branch office in the state. The institute has already started its operation and undertakings for various activities. The institute has trained 1750 participants from the Nagaland where 1698 were Entrepreneurship and Skill Development Programme (ESDP) participants.

## 8 Analyses and Results

### 8.1 Demographic Profile

Demographic and socio-economic profiles of the entrepreneurs are very important when we consider them as a respondent to study about the role of government in promoting entrepreneurship. In this study, they include age, educational qualification, ownership, experience, monthly turnover and source of initial capital. However, gender of the entrepreneurs and location of the business have not been included because all entrepreneurs were male and their business location was either in semi-urban or urban areas only.

From the Table 4, we can understand that majority of the respondents were at the age more than 45, i.e. 44.4% of the total sample followed by age below 35 (33.3%). In terms of qualification, majority (41.7%) of the respondents have completed only high school level. Ownership has a better role in acquiring control of the business, and this study shows that 77.8% were sole proprietorship and 22.2% were into partnership. As per the experience wise, majority (47.3%) of them were in the business of more than 15 years. When it comes to monthly turnover, 27.8% were below Rs. 50,000, 58.3% have between Rs. 51,000 and Rs. 75,000 and 13.9% have above Rs. 75,000 monthly turnover.

Source of fund is the most important economic factor to undertake any type of business activity. Information on enterprises set up by the NISIET-trained entrepreneurs revealed that about 56.6% of the entrepreneurs have set up their enterprises from their own resources (Jogi 1999). This fact shows that finance is the bottleneck in setting up the enterprises in the NER. Therefore, to ensure success in EDPs, financial institutions, particularly IDBI and state government should re-look to ensure timely availability of finance to the potential entrepreneurs. This study

**Table 4** Demographic profile of the entrepreneurs

Label	Categories	Count	Percentage (%)	Total (%)
Age	Below 35	12	33.3	100
	35–45	8	22.2	
	Above 45	16	44.4	
Qualification	High school	15	41.7	100
	Matriculation	12	33.3	
	Graduation	9	25.0	
Ownership	Sole proprietor	28	77.8	100
	Partnership	8	22.2	
Experience	Less than 5 years	5	13.9	100
	5–10 years	14	38.9	
	More than 10 years	17	47.2	
Monthly Turnover	Below 50 k	10	27.8	100
	51 k–75 k	21	58.3	
	Above 75 k	5	13.9	
Source of finance	Owned fund	25	69.4	100
	Institutional support	11	30.6	

Source Primary Data

also found out that majority (69.7%) of the respondents used owned fund as their initial finance and as few as 30.6% have availed institutional funds.

## 8.2 Hypotheses Testing

H<sub>0</sub>1: There is no association between age and monthly turnover (see Table 5).

Table 5 shows the result of chi-square test for association between age and monthly turnover. The chi-square test value is 9.900, and P value is 0.042. Since P value is less than 0.05, null hypothesis is rejected at 5% level of significance and hence, it is concluded that there is an association between age and monthly turnover.

Based on the row and column percentage, we can understand that 12 respondents were below age 35 where most of them have monthly turnover below Rs. 50,000. Eight respondents were aged between 35 and 45, and majority of them have income of more than Rs. 50,000. Finally, 16 respondents were aged above 45, and their average monthly turnover were much higher than that of aged below 35.

H<sub>0</sub>2: There is no association between academic qualification and monthly turnover (see Table 6).

Table 6 shows the result of chi-square test for association between educational qualification and monthly turnover. The chi-square test value is 11.159, and P value is 0.025. Since P value is less than 0.05, the null hypothesis is rejected at 5% level



**Table 5** Chi-square test for association between age and monthly turnover

Age	Monthly turnover			Total	Chi-square value	P value
	Below 50 k	51–75 k	Above 75 k			
35 and below	6 (50.0%) [60.0%]	6 (50.0%) [28.6%]	0 (0.00%) [0.00%]	12	9.900	0.042**
35–45	2 (25.0%) [20.0%]	3 (37.5%) [14.3%]	3 (37.5%) [60.0%]	8		
45 and above	2 (12.5%) [20.0%]	12 (75.0%) [57.1%]	2 (12.5%) [40.0%]	16		
Total	10	21	5	36		

Source Primary Data

Note 1. \*\* denotes significant at 5% level

2. The value within ( ) refers to row percentage

3. The value within [ ] refers to column percentage

**Table 6** Chi-square test for association between educational qualification and monthly turnover

Educational qualification	Monthly turnover			Total	Chi-square value	P value
	Below 50 k	51–75 k	Above 75 k			
High school	4 (26.7%) [40.0%]	11 (73.3%) [52.4%]	0 (0.00%) [0.00%]	15	11.159	0.025**
Matriculation	5 (41.7%) [50.0%]	6 (50.0%) [28.6%]	1 (8.3%) [20.0%]	12		
Graduation	1 (11.1%) [10.0%]	4 (44.4%) [19.0%]	4 (44.4%) [80.0%]	9		
Total	10	21	5	36		

Source Primary Data

Note 1. \*\* denotes significant at 5% level

2. The value within ( ) refers to row percentage

3. The value within [ ] refers to column percentage

of significance and hence, it is concluded that there is an association between educational qualification and monthly turnover.

It is understood that majority of the respondents were having only high school qualification (41.7%), and among them 52.4% were having a monthly turnover between Rs. 50,000 and Rs. 75,000. About 33.3% of the respondents have their matriculation qualification whose majority income was below Rs. 50,000 per month. As less as 9 respondents were having graduation as their minimum qualification, where more than 90% have monthly turnover of more than Rs. 50,000.

**Table 7** Chi-square test for association between work experience and monthly turnover

Work experience	Monthly turnover			Total	Chi-square value	P value
	Below 50 k	51–75 k	Above 75 k			
Less than 5 years	2 (40.0%) [20.0%]	3 (60.0%) [14.3%]	0 (0.00%) [0.00%]	5	6.496	0.165
5–10 years	6 (42.9%) [60.0%]	5 (35.7%) [23.8%]	3 (21.4%) [60.0%]	14		
More than 10 years	2 (11.8%) [20.0%]	13 (76.5%) [61.9%]	2 (11.8%) [40.0%]	17		
Total	10	21	5	36		

Source Primary Data

Note 1. The value within () refers to row percentage

2. The value within [] refers to column percentage

**Table 8** ANOVA for difference between experience and problems faced by the entrepreneurs

Experience	N	Mean	S D	F value	P value
Less than 5 years	5	4.42	1.341	1.817	0.178
5–10 years	14	4.45	0.841		
More than 10 years	17	4.50	0.000		
Total	36	4.47	0.721		

Source Primary Data

H<sub>03</sub>: There is no association between work experience and monthly turnover (see Table 7).

Table 7 shows the result of chi-square test for association between work experience and monthly turnover. The chi-square test value is 6.496, and P value is 0.165. Since P value is greater than 0.05, the null hypothesis cannot be rejected. Hence, it is concluded that there is no association between work experience and monthly turnover.

H<sub>04</sub>: There is no significant difference between experience and problems faced by the entrepreneurs (see Table 8).

The ANOVA Table 8 shows the result of significant difference between experience and problems faced by the entrepreneurs. The table shows F value 1.817 and P value 0.178. Since the probability value is more than 0.05, null hypothesis cannot be rejected. Therefore, it is concluded that there is no significant difference between experience and problems faced by the entrepreneurs. The mean rank of the experience and problems faced by the entrepreneurs are 4.42, 4.45 and 4.50. This indicates that the problems among the entrepreneurs are very much similar irrespective of the experience.

H<sub>05</sub>: There is no significant difference in the mean rank towards the problems faced by the entrepreneurs (see Table 9).

**Table 9** Friedman signed rank test

Problems faced by the entrepreneurs	Mean	Std. deviation	Mean rank	Chi-square value	P value
Inadequate warehouse facilities	3.66	1.549	3.72	166.507	0.000***
Transportation problems	4.72	2.456	4.75		
Lack of market information	2.77	1.494	2.83		
Price fluctuation	4.88	0.887	4.89		
Access to finance	1.72	1.003	1.72		
Political stability	7.11	0.820	7.17		
High tax	7.38	0.837	7.39		
Technological setback	3.50	1.082	3.53		

Source Primary Data

Note \*\*\* denotes significant at 1% level

**Table 10** Impact of training programmes among different age groups

Age group	N	Mean	Std. deviation
35 and below	12	4.47	1.435
35–45	8	4.25	1.581
Above 45	16	4.34	1.147
Total	36	4.36	1.443

Source Primary Data

**Table 11** ANOVA table between age group and impact of training programmes

	Sum of squares	df	Mean square	F	Sig.
Between groups (combined)	12.972	2	6.486	3.572	0.039**
Within groups	59.817	33	1.816		
Total	72.889	35	8.302		

Source Primary Data

Note 1. \*\* denotes significant at 5% level

Table 9 of the Friedman Rank Test signifies the chi-square value 166.507 and P value 0.000\*\*\*. Therefore, null hypothesis is rejected at 1% level of significance and hence we conclude that there is a significant difference between mean ranks among the problems faced by the entrepreneurs. The table signifies access to finance is the major problem faced by the entrepreneurs followed by lack of market information and technological setback.

H<sub>06</sub>: There is no significant difference in the impact of training and development programmes on different age group (see Table 10).

The ANOVA Table 11 for significant difference in the impact of training programmes among different age groups shows F value 3.572 and P value 0.039 (Tables 12 and 13). Since the probability value is less than 0.05, null hypothesis is rejected at 5% level of significance and hence conclude that there is a significant difference on impact of training among the different age groups (Table 14).

**Table 12** Marketing assistance on different sources of finance

Source of finance	N	Mean	Std. deviation
Owned fund	26	3.50	2.158
Institutional support	10	3.65	2.716
Total	36	3.54	2.336

Source Primary Data

**Table 13** ANOVA table between source of finance and marketing and financial assistance

	Sum of squares	df	Mean square	F	Sig.
Between groups (combined)	8.138	1	8.138	1.513	0.227
Within groups	182.862	34	5.378		
Total	191.000	35	13.516		

Source Primary Data

**Table 14** Frequencies distribution of entrepreneurs’ degree of agreeableness on impact of training and development programmes among entrepreneurs

S. No.	Particulars		Agree	Strongly Agree
1	I have benefited from the training programme conducted by the state government	N	16	20
		%	44.40%	55.60%
2	I have improved my technical skills after attending the training programme	N	32	4
		%	88.90%	11.10%
3	Technical training organized by the organization has benefited the junior workers	N	14	22
		%	38.90%	61.10%
4	The standard of living has improved through entrepreneurship education	N	14	22
		%	38.90%	61.10%
5	Attending training and development programme enhances work productivity	N	18	18
		%	50%	50%
6	Efficiency and effectiveness of the business can be improved by entrepreneurship training	N	18	18
		%	50%	50%
7	Business output can be increased through entrepreneurship education	N	12	24
		%	33.30%	66.70%

Source Computed from Primary Data

H<sub>0</sub>7: There is no significant difference between source of finance and marketing and financial assistance provided by bank and other financial institutions.

The above ANOVA Table 13 for significant difference in the source of finance and the marketing and financial assistance provided by bank and financial institutions shows F value 1.513 and P value 0.227. Since the probability value is more than 0.05, we cannot reject null hypothesis and hence conclude that there is no significant difference between source of finance and marketing and financial assistance provided by bank and financial institutions.

As we can see from the above table, it is very much clear that the entrepreneurs have positive results after attending training and development programmes conducted by the local government and institutions. It is understood that government initiatives are paying off well in developing enterprises in the state (Table 15).

(a) Trade credit

With regard to the marketing and financial assistance provided by the bank and local government to the entrepreneurs, it is assumed that trade credit is not satisfactory or unavailable to some of the traders. Many respondents stayed neutral in opinion with these facilities. When further enquiry was made, it was found that they have not approached banks for availing the facilities. In this case, the government and banker should make entrepreneurs aware of such facilities during the training programme.

(b) Bank overdraft facilities

Bank overdraft facilities provided to the traders were quite disappointing but when further enquire was made, it was noted that most of the entrepreneurs did not had a bank account open in their business name.

(c) Availability of capital subsidy

About 55.6% of the respondents agreed with the capital subsidy provided by the local government. The remaining disagreed or remained neutral not because they were not aware but they never intended to approach the local government.

**Table 15** Frequencies distribution of entrepreneurs' degree of agreeableness on financial and marketing assistance from local government and banks

Financial and Marketing Assistance		SD	D	CS	A	SA
Bankers provide trade credit	N	–	12	8	16	–
	%	–	33.30%	22.20%	44.40%	–
Bank provides overdraft facilities	N	–	25	4	7	–
	%	–	69.40%	11.10%	19.40%	–
Local government provides capital subsidy	N	–	14	2	20	–
	%	–	38.90%	5.60%	55.60%	–
Tax incentives are available	N	–	–	–	30	6
	%	–	–	–	83.30%	16.70%
Marketing assistances are provided	N	–	3	–	26	7
	%	–	8.30%	–	72.20%	19.40%
DIC encourages bankers and entrepreneurs	N	–	5	7	22	2
	%	–	13.90%	19.40%	61.10%	5.60%
SISI facilitates in marketing products	N	–	–	–	36	–
	%	–	–	–	100%	–

Source Computed from Primary Data

(d) Availability of tax incentives and marketing and financial assistances

Tax incentives were available among the entrepreneurs, and marketing and financial assistances provided by the banks and financial institutions were satisfactory. It was learnt that some of the entrepreneurs did not approach for any assistance neither to the bank or to financial institution but when asked if they plan to avail in future, it was positive. About 72.2% of the respondents agreed for availability of market development facilities.

(e) District Industries Centre Encourage Bankers and Traders

In terms of district industries centre in encouraging banker and traders, their experience and expectation have been positive and satisfactory enough.

(f) SISI facilitates in marketing the products

All entrepreneurs were satisfied with the facilities provided by the Small Industries Service Institute who provide consultancy and training to small entrepreneurs from time to time by motivating and encouraging them to participate and help them develop better skill by providing better marketing platform.

## 9 Findings

The findings of this study provide evidence that local government plays very important role to promote entrepreneurship in the state by organizing employment campaigns in collaboration with the NGOs. The workshops and seminars conducted to help young entrepreneurs to dwell with the concept PPP have also encouraged people to invest in the developmental activity of the sector. The study also implicit that while DICs continue to promote and develop SSIs in the state, government strengthens the DICs with training and developmental facilities.

With regard to the institutions, the responsibilities implemented for organizing training programmes to the entrepreneurs acts as a link between sponsoring organization and the participants. The NBDA on the other hand provides better platform to the entrepreneurs by involving VBDC and DIC in facilitating skill and capacity building programmes to upgrade entrepreneurs' skill on design development while assistance is given in the form of tools and machinery.

The analysis result found out that there is an association between educational qualification and monthly income among the entrepreneurs. On the other hand, experience did not have any association with the business profitability. The problems faced by the entrepreneurs while marketing handicraft products were very much the same among the entrepreneurs, irrespective of the experience and educational qualification. The finding also suggested that there is a significant difference on the impact of training programmes on entrepreneur's age. Since many entrepreneurs were not satisfied with the overdraft facility, and further investigation

suggested they did not have a bank account in their business name, it is mandatory for the entrepreneurs to have a bank account opened in the name of the business to avail overdraft facilities from the bank.

## 10 Suggestions

- (1) Access to finance is the major problem which includes start-up capital. Therefore, if possible, the government and institutions should involve bankers during the training programmes by making them address the participants about the bank schemes and, more particularly, the existing formalities while approaching the banks. Through this process, the bankers will know about the possible entrepreneurs approaching them in the near future. This will enable the bankers to plan and keep some provision to meet such expectations. On the other hand, entrepreneurs also become realistic in approaching the banks.
- (2) The institutions and agencies are also encouraged to continue in organizing and conducting regular training and skill development programmes for the entrepreneurs. It is to be understood that training is an activity only to stimulate entrepreneurship, though it is an important activity to boost the entrepreneurship. To make this training success, support and sustaining activities are to be performed in need for a comprehensive policy and collaborative efforts. For this, district industries centres are to play a major role by collaborating with agencies and institutions at different stages of training programme to make the training more successful.
- (3) The state government should also utilize specific schemes for NGOs to provide more services to the entrepreneurs while continuing to promote various employment schemes particularly among the rural youth through Pradhan Mantri Rozgar Yojana (PMRY), Employment Guarantee Scheme, and Village Self-Employment Scheme, etc. Proper utilization of these schemes will provide gainful employment by establishing self-employment ventures among rural and urban unemployed and underemployed poor. Also, the state government should encourage Khadi and Village Industries Commission, Dimapur, to continue sponsoring EDP.
- (4) The government should also encourage bankers and entrepreneurs when it comes to availing trade credit and overdraft facilities. This study suggest that many entrepreneurs have not been benefited through credit availability and this can be due to unawareness among the entrepreneurs or because few have already struggled earlier in availing the facilities but unsuccessful. On the other hand, government and bankers should encourage the entrepreneurs to open a bank account in their business name because through this study it is evident that many entrepreneurs were running business without bank account registered in their business name. Through this step, the entrepreneurs would find it easier to avail overdraft facilities and other schemes where both parties (banker and entrepreneur) would meet an end to their requirement.

## 11 Conclusion, Limitation and Future Research

Bankers are genuinely interested in advancing small-scale units, which will simultaneously increase the performance and profitability of bank branches, but one of the problems faced by the banks in the NE Region is low credit deposit ratio (Prakasham 1999). What appears to be the missing link is the lack of advance information on both ends of bankers and entrepreneurs where the willing bankers could not be aware of the wanting entrepreneurs. Bridging the big gap between the two through proper advance information on financing and funding would help the entrepreneurs as well as the banks to end their requirements.

The entrepreneurs in this sector would be benefited when the governments have a rational policy which offers adequate support and protection to this sector enabling them to tap every market where there is a big demand for handicrafts products especially in the West and European markets. Though the government provides fiscal and monetary incentives, this sector also suffers from lack of modern technology and skilled labour, inadequate bank credit and an insufficient marketing network. Therefore, it is important that frequent skill development programme, technical and training education, etc. should be conducted to generate mass employment opportunities, which will help entrepreneurs especially those living in the rural area. Based on the study outcome, it is recommended that the government should enforce more regulations that will bridge gap between institutional development and entrepreneurial endeavour and create such an environment that will see growth of new business ventures.

Moreover, sample size is the limitation of the study. This study could have included other handicraft entrepreneurs as well but because of the unavailability of proper statistical record and sector itself being unorganized, the researcher was confined only to bamboo and wood handicrafts. Further study is also recommended on this subject by taking other factors which are not covered in this study. There is also a great need for further examination or exploration on successful entrepreneurs and taking note their strategies and behaviours in approaching market, and the institutions can adopt that as a training programme curriculum.

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# **Part V**

## **Conclusion**

# Chapter 21

## Promoting Entrepreneurship: The Role of Educators

Mathew J. Manimala

**Abstract** New ventures in an economy, like the new sprouts in an ecosystem, have a significant role in stimulating and developing the economy. However, start-up ventures are also saddled with the liabilities of smallness and newness and therefore, are vulnerable to various environmental forces. In view of the beneficial impact of new ventures on the economy in terms of innovations, employment generation and wealth creation, governments and other public institutions are interested in facilitating their survival and growth. The focus of such facilitation, for a long time, has been on creating a benign environment for business, which was later found to be ineffective without the simultaneous development of the entrepreneurial orientations and capabilities of the individual. Hence, the focus has now shifted to the field of higher education, which is expected to build entrepreneurial competencies in individuals. While it is possible for higher education to impart the knowledge and, to some extent, the skills necessary for business creation, the attitudes and orientations are formed much earlier through the early (family) socialization and primary level education. It would therefore follow that entrepreneurship education has to start from the early-stage development of the individual, which is the foundation on which the higher education system can further develop the entrepreneurial individual. Once a strong foundation is laid, the efficacy of the higher education system for entrepreneurship development can

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be improved by various initiatives such as: (1) external association and assistance schemes; (2) interdisciplinary programs; (3) specialized offerings in entrepreneurship; (4) entrepreneurship skill development; (5) real-life entrepreneurial opportunities as part of the curriculum; (6) distance education through electronic media; and so on. The overall model for entrepreneurship education has to address the issues relating not only to the task environment but also to the general environment including the sociocultural norms prevalent in the country.

**Keywords** Entrepreneurship development • Educator's role • Early stage education • Higher education • Task environment • General environment

## 1 Introduction

### 1.1 *New Ventures in the Economy*

“Without vision, nations perish”, so says an ancient proverb. Paraphrasing this to suit the realities of our times, it would be no exaggeration to say that “without entrepreneurship, economies perish”. Indeed, it is entrepreneurship and the resultant creation of new ventures that is the source of vitality and growth of an economy. One may compare the new start-ups in an economy to the new sprouts in an ecosystem, without which the system would stagnate and eventually die. Economies therefore would thrive only if the entrepreneurial activity is high among their citizens, leading to a constant supply of new ventures.

New venture statistics on vibrant economies like the USA offer support to the vital role of start-ups in keeping the economy vibrant and growing. In the USA, for example, small businesses contribute 90% of all new jobs and 70% of all new products and services. 97% of all non-farming businesses are small, accounting for 50% of all business employment. Similarly, 80% of all manufacturing firms in the USA are small, and they account for 25% of sales in the manufacturing sector. In absolute terms, there are about 2 million business start-ups every year in the USA, of which 50% are micro-businesses employing not more than 2 people (Hisrich and O’Cinneide 1996).

Even though such systematic data on new ventures may not be available for all countries, the available indicators show that the picture is not very different. In an effort to make a comparative assessment of the level of entrepreneurial activity in different countries, a multi-country research project called “Global Entrepreneurship Monitor” (GEM) has been launched by the London Business School, UK, and Babson College, USA. The project has been going on for over 15 years, and as of 2016, it has a research partnership in more than 60 countries. India was a partner in this project for 3 years, when the India research was done by the NS Raghavan Centre for Entrepreneurial Learning (NSRCEL) at the Indian Institute of Management Bangalore (IIMB). The findings of GEM research also reveal that,

like in the USA, entrepreneurial activity in all parts of the world has a very large component of small start-ups. The world average (that is, for 37 countries) on this states that about 96% of the new start-ups have less than 5 employees (Reynolds et al. 2002). The corresponding figure for India for the year 2002 (when the present author was leading the GEM India team) is 98%. The India studies for 3 years (2000–2002) have also highlighted the fact that the entrepreneurial activity in India has been on the rise. In the 3 years under observation, it has gone up from 8.97% in 2000 to 11.55% in 2001 to 17.88% in 2002. In the last-mentioned year, it was the second highest among 37 countries (Manimala 2002). The progressive increase of entrepreneurial activity in the country is also in line with the vibrancy that is being observed in the country in recent years. Presumably, it is the level of entrepreneurial activity that forms the basis for the vigour and vibrancy of the economy.

## ***1.2 SMEs and Their Vulnerabilities***

While a thriving economy will have a large number of new start-ups to demonstrate its vitality, the fate of these new ventures is not all that bright. Statistics show that even in a strong economy like that of the USA, two-thirds of all new ventures perish within the first 5 years of their existence (Hisrich and O’Cinneide 1996). The story about the UK start-ups is also not different. Official statistics in India too present a picture of high failure rates. In one of the business communities in India, there is a saying admonishing a start-up entrepreneur to wait for one thousand days to see if his venture would actually take off, implying that the initial one thousand days are the most critical period in the life of a venture, when the chances of failure are high. In attempting to define the entrepreneurial phase in the life of a new venture, the international research team of the Global Entrepreneurship Monitor (GEM) project decided that it is the first 42 months when the new venture needs the “entrepreneurial” care, beyond which the managerial phase begins. All this special emphasis on the initial period in the life of a venture is obviously based on an understanding of the special vulnerabilities associated with this phase. While new ventures are the source of vigour and vitality in the economy, they are also quite vulnerable and so they deserve special assistance from the society.

## **2 Entrepreneurship: The Need for Support from the Education System**

Among the various services provided by a society to its members, education does have the prime position. The renaissance and the subsequent developments in Europe was a revolutionary change in its educational system shifting the emphasis

from philosophical and theological pursuits to positive and applied sciences. The Meiji restoration in Japan was followed by a focus on technical education (as propagated in the 1872 law on modern education), which laid the foundations of the current economic development of Japan. Reforms in the education system have been a continuous process in Japan. The Board of Education Law of 1948 placed more emphasis on elementary and lower secondary education and delegated powers to the local authority in an attempt to deregulate and decentralize education in line with the patterns existing in the USA (Muta 2000). Liberalization and privatization of education leading to freedom of thought and action and responsiveness to the emerging environment are observed to be a precondition for entrepreneurship and economic development. Education plays a twofold role in the development of entrepreneurship. One of them is in creating the right attitudes in the individuals, and the other in developing their knowledge and skills relevant for entrepreneurship.

In one of my studies on the influence of the environmental factors on the emergence of innovative entrepreneurs, it was found that the task environment of business did not have any statistically significant impact on the emergence of innovative entrepreneurs (Manimala 2005). The elements of the task environment are those factors that facilitate the performance of the immediate tasks of a business enterprise. These include the technical and managerial know-how, sources of finance, trained manpower, supply of raw material, readiness of the markets, facilitating institutions, and the like. Facilitation of the task environment would help more in channelizing the entrepreneurial initiatives into certain areas than in developing such initiatives. What helps in the creation of entrepreneurial attitudes in individuals are the factors related to the general environment, namely the legal-political, economic, sociocultural, and educational systems of a country. Thus, education has got a dual role in promoting entrepreneurship. The early-stage education (primary and secondary) has a role in shaping the values and attitudes of the individual, which would influence the choice of his/her career. While educators of primary and secondary levels have an opportunity to influence the individuals towards taking up an entrepreneurial career, the quality of such entrepreneurship could be substantially improved by the technical/entrepreneurial/managerial knowledge and skills imparted at the higher education level.

The model of entrepreneurship development implied in the findings of the above study would suggest a dual role for education, as shown in Fig. 1.

An obvious implication of this model is the two-pronged influence of education on entrepreneurship. At one end of the continuum, the early-stage education is partly responsible for the development of entrepreneurial traits, motives and attitudes in the individual, leading to the creation of entrepreneurial ventures. At the other end of the continuum, it is the higher education system that provides the technical and managerial knowledge and skills to the individual to enhance the quality of his/her entrepreneurship and to help the fledgling new venture survive and grow against all odds particularly those created by its "liability of newness as well as smallness".

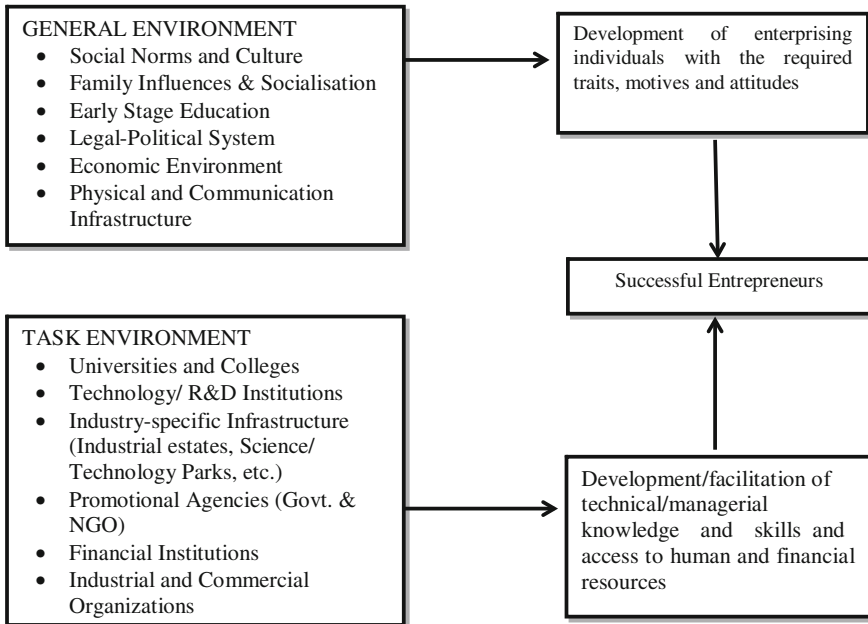


Fig. 1 Model of entrepreneurship development. Source Adapted from Manimala (2005)

### 2.1 Entrepreneurship: The Role of Early-Stage Education

The significance of early-stage education and socialization for entrepreneurship has been specially highlighted in recent times by the great pioneer of entrepreneurial motivation research, David McClelland, who proposed that the development of achievement motive in individuals is primarily a function of the early-stage education and socialization (McClelland 1961). He even suggested that the themes of nursery rhymes and stories would have a profound influence on the development or otherwise of entrepreneurial attitudes. Independence of thought and action supported by nurturance is the essential ingredient in the process of the making of an entrepreneur. Inputs of this kind would come primarily from the mother at home and can be replicated in the elementary school as well.

Besides, since elementary schools have the opportunity to mould the students at a very impressionable age in their lives, the role models that they provide to them will have a significant impact on their future lives. A major difference observed in this regard between the developed and the developing nations is that the role models in the latter countries are generally confined to political and religious leaders, whereas in the former, they would include inventors, innovators, entrepreneurs, and achievers of various other kinds. As Plato said, “what is honoured in a society will be cultivated there”. So if you would like to have more entrepreneurs in your society, you have to honour the entrepreneurs. A cursory glance at the



elementary school text books especially in developing countries would show that there are hardly any entrepreneurs being featured as heroes and role models therein.

While the developed countries, especially the USA, have been the pioneers of redesigning the school curricula with a view to creating an enterprising culture in the young minds, they too are not fully satisfied with the outcomes of such efforts. Data from the UK show that educators at the primary and secondary levels need to make a lot more efforts to channelize the energies of the young people to entrepreneurial pursuits. For example, it was observed that about 40% of the known offenders are under 21, which is a natural consequence of the fairly high dropout rates from school. It is estimated that about 7% of the students there leave full-time education before the age of 16. This rate is 15% for the inner cities, where the crime rates are also correspondingly high. It has been suggested (and shown through practical interventions at school) that much of the criminal activities of the young people can be controlled if they are guided towards legitimate ways of making money through entrepreneurial pursuits (Vinten and Alcock 2004).

In designing interventions at the school level for promoting entrepreneurship, attempts have been made to modify the formal as well as the non-formal actions. At the formal level, the interventions are mainly through the revision of curricula. In the UK, for example, about 4% of the schools have entrepreneurship courses as part of the formal curriculum in the primary and secondary schools.

The non-formal actions are carried out mainly by the non-governmental organizations. One example of such an organization is described by Vinten and Alcock (2004). It is the National Foundation for Teaching Entrepreneurship (NFTE), founded by Steve Mariotti for helping rebellious youngsters to make money in legally and socially acceptable manner. Mariotti had an unusual career progression from corporate executive to entrepreneur to school teacher to social entrepreneur. Armed with an MBA from the University of Michigan Business School in 1977, Mariotti started his career as a financial analyst with Ford Motor Company. Soon he was fed up with the corporate politics and left Ford to become an entrepreneur. His decisions to wind up his own business and take up a job as a school teacher in one of the worst suburbs of New York were an unusual response to a common but unpleasant occurrence. The unpleasant event was an attack on him by truanting youngsters, which made him think deeply on their flight. He realized that the root cause of the malady was poverty and unemployment and believed that the best way to solve the problem was to help them to earn money in a legally and socially acceptable manner. The idea of teaching entrepreneurship to school kids occurred to him under such circumstances, and Steve Mariotti took a bold decision to take up a teaching job in a school located in a depressed suburb of New York. The initial years were very difficult and challenging, but Mariotti persisted for 6 years and finally in 1987 set up the National Foundation for Teaching Entrepreneurship (NFTE). The movement is spreading fast into several countries. NFTE now has operations in 14 different countries with about 1600 certified teachers covering over 40,000 students in 25 schools. It is a not-for-profit organization created with the objective of training students in academic as well as life skills through a hands-on entrepreneurship and business ownership curriculum. NFTE programmes aim to

develop various skills required for business ownership such as (a) numeracy and literacy skills, (b) technical and IT skills, (c) record-keeping and information management skills, (d) problem-solving skills, (e) communication skills, and (f) business knowledge and skills. The most important ingredient of NFTE training, however, is the hands-on experience of carrying out the operations on an actual business, which the students would continue after the training. All the programmes are carried out only by the Certified Entrepreneurship Teachers (CET), who are carefully selected and trained by NFTE. The successes of NFTE with the creation of new ventures by secondary school students are commendable.

Well, these are some examples of the many things that could be done at the elementary and secondary school level. While the development of entrepreneurial attitudes, values and orientation is largely a function of the early-stage education and socialization, the development of knowledge and skills can be substantially strengthened by the higher education system. The role of higher education in entrepreneurship development will be discussed in the next subsection.

## ***2.2 Entrepreneurship: The Role of Higher Education***

It is only in recent times that higher education has begun to be perceived as an instrument of entrepreneurship promotion. For a long time, the two have kept a distance from each other. Universities rarely considered entrepreneurship to be a discipline having a body of knowledge that is worthy of being taught and learned. This was naturally to be expected as the word ‘entrepreneurship’ was of fairly recent origin. It was only in 1803 that the French economist J.B. Say coined the word ‘entrepreneur’ to distinguish him from the ‘investor’ on the one hand and the ‘manager’ on the other. It took a fairly long time for the word to get fully accepted into the English language. It may not be a mere accident that some word processing packages still show this word with a red underline!

If the acceptance for the word and the concept was slow, the research on the ‘subject’ had to be slower, thus resulting in the tardy development of a body of knowledge on entrepreneurship. Naturally, universities and higher education institutions cannot launch any academic programme without the support of a body of knowledge on the subject. It was only by the middle of the twentieth century that entrepreneurship research picked up momentum and the first academic programme in entrepreneurship was started by Harvard University in the year 1945. The purpose of this programme was to stimulate the economy after the winding up of several industrial enterprises created primarily for serving the needs of World War II. The programme was targeted on the returning war veterans so that they could create opportunities for self-employment. Since then, there has been growing recognition among many higher education institutions that entrepreneurship courses could indeed be an effective tool for them to stimulate the economy through their graduates, who would start up new ventures and thereby create wealth and provide employment.

Such hopes have not always been realized in actual practice as shown by a few studies comparing the entrepreneurial performance of entrepreneurship graduates with that of other graduates. The disappointment is not just with the educational programmes of the Universities but also with the training programmes designed and conducted for SME entrepreneurs. Academic institutions generally find it difficult to attract SME entrepreneurs to its programmes. There is a prevailing view that such lack of cooperation between these two entities is due to a basic mistrust of academics among entrepreneurs. This sentiment is voiced rather strongly in the 1971 Bolton Committee report of the UK, which states that: “Academic institutions of most kinds arouse in most entrepreneurs a degree of mistrust second only to that accorded to government” (Bolton Committee 1971). Well, that apparently is an old story as Bolton was writing more than 40 years ago. There is indeed more trust between the parties now, but the outcome has not changed much. Among the several reasons for SME entrepreneurs’ lack of interest in university programs are the cost of programs, their perceived ineffectiveness and the entrepreneurs’ inability to leave their businesses to attend academic programs. Of these, it is the perceived ineffectiveness that should cause some concern among the higher education institutions, as it might be due to a fundamental mismatch between what is done by higher education institutions and what is actually needed by SME entrepreneurs.

In a comprehensive and thorough analysis of the learning orientations in university education along with the contrasting juxtapositions of the learning needs of entrepreneurs, Allan Gibb has identified a series of mismatches, as reproduced in Table 1 (Gibb 1993).

**Table 1** University offerings versus entrepreneurs’ needs: a contrasting view

University/B-school learning focus	Entrepreneurship education/training learning focus
• Critical judgment after analysing large amounts of information	• Gut feel decision-making with limited information
• Understanding and recalling the information itself	• Understanding the values of those who transmit/filter information
• Assuming goals away	• Recognizing the widely varied goals
• Seeking (impersonally) to verify the absolute truth by study of information	• Making decisions on the basis of judgment of trust and competence of people
• Understanding the basic principles of the society in the metaphysical sense	• Seeking to apply and adjust in practice to basic principles of society
• Seeking the correct answer, with (enough) time to do it	• Developing the most appropriate solution under pressure
• Learning in the class room	• Learning while and through doing
• Gleaning information from experts and authoritative sources	• Gleaning information from any and everywhere and using them to promote business interests
• Evaluation through written assessment	• Evaluation through judgment of people and events through direct feedback
• Success in learning measured by passing of knowledge-based examination	• Success in learning measured by solving problems and learning from failure

Source Adapted from Gibb (1993)

Yes, the differences highlighted are genuine and one could add a few more items to the list. The basic difference is that universities focus on imparting knowledge and information as against entrepreneurs' need for developing implementation skills. The long traditions of imparting knowledge-oriented education by the higher education institutions have come in the way of faculty developing any competence in imparting skill-oriented education. Consequently, it is natural for entrepreneurs not to trust such institutions and the programmes offered by them. Additionally, the time and cost constraints come in the way of entrepreneurs making use of the programmes offered by universities and higher education institutions.

Of course, it should be noted that the university programmes are of two categories (a) the degree programmes in entrepreneurship offered to fresh students aspiring to be entrepreneurs, and (b) the training programmes offered to entrepreneurs with a view to improving their effectiveness. Unlike in the case of Business Administration, the experience of universities in offering degree programmes in entrepreneurship has not been very encouraging. Graduation in entrepreneurship has not yet become an attractive proposition for the young educational aspirants. This is partly because a degree of this kind will not guarantee entrepreneurial success. Entrepreneurship needs many more resources and competencies than knowledge and skills. Several research studies show that the performance of entrepreneurship graduates is not significantly different from that of the "non-graduate" entrepreneurs, except that the former get into the business a few years earlier than the latter. This may be because the latter would work for a few years in other organizations and take the plunge only after developing confidence and competencies and more importantly after perceiving the right opportunities in the market. The importance of work experience in competency and confidence development and opportunity perception cannot be over-emphasized. As stated by Ronstadt (1988) in what he calls the "corridor principle", the encounter with the real-life business situations as it happens when working with such organizations opens a large corridor for the individual wherein he could perceive many more opportunities than if he were not there. It would therefore be beneficial even for the entrepreneurship graduates to work for sometime with other organizations, which is a relatively less expensive way of gaining "on-the-job" training for oneself and thereby developing "implementation skills", for which universities apparently provide very little help. It is observed that universities have greater success with training programmes for entrepreneurs who have already crossed the start-up phase, when the need is for the knowledge of management functions and an orientation for strategic thinking. The difficulty, at this stage, however, is in bringing the entrepreneur into the class room, as he/she would be increasingly worried about the time and cost constraints.

### **3 Teaching Entrepreneurship: Some Best Practices**

It is obvious that the teaching of entrepreneurship is different from that of other subjects/disciplines. There is clearly a need for devising new strategies and methods for improving the effectiveness of entrepreneurship education. In fact, many universities and higher education institutions have already developed such innovative strategies and methods for promoting entrepreneurship education. One of the most comprehensive listings of the best practices in this field is provided by Patrick Sanderock (2001) in a study of the entrepreneurship education programmes of the US universities. The more prominent among these practices are briefly described under six major sub-headings below.

#### ***3.1 External Association and Assistance***

Universities seek external support for entrepreneurship education mainly to fill the competence and resource gaps. As we have observed above, the mismatches between the traditional competencies and orientations of the universities and the needs of entrepreneurship education necessitate a constant effort in reorienting the entrepreneurship education and developing their competencies for entrepreneurship education. The measures taken in this regard include: (a) creation of entrepreneurship centres with financial assistance and advisory participation from external agencies, (b) constituting advisory boards with eminent experts from various fields including entrepreneurs, (c) training of faculty especially in the technical departments by entrepreneurship experts, (d) facilitating students' interaction with practicing entrepreneurs through schemes like "entrepreneurs-in-residence hall", student mentoring by entrepreneurs, collaborative teaching with entrepreneurs, students' consulting work for entrepreneurial firms, etc., and (e) securing external funding support for entrepreneurship outreach activities such as subsidized programs, tuition support, seed funding, etc. Collaborations of these kinds with external agencies are intended to transfer the tacit knowledge available with entrepreneurs and other experts to the university system and thus make the latter's programmes more effective. They also help to change the orientation of the university faculty and to reduce the cost of programmes for the clients.

#### ***3.2 Interdisciplinary Programs***

Programmes for developing entrepreneurship among technology and professional disciplines are organized on the assumption that there is a greater chance for those with technical and professional skills to become entrepreneurs. Such programmes

are mainly in two areas: (a) science and technology disciplines, where the programs include (i) integrated science, technology and entrepreneurship programs, (ii) entrepreneurship courses for engineers and technologists, (iii) commercialization course for inventors, and the like; (b) professional careers and disciplines, where there are targeted courses for artists, musicians, entertainers, film and TV personnel, designers, architects, lawyers, chartered accountants, and so on. A third kind of programmes in this category is in the reverse direction where the principles of other disciplines are applied to entrepreneurship, where there are programs like “The psychology of Entrepreneurship”, “Creativity for Entrepreneurship”, “Marketing for SMEs”, “Accounting and Financial Knowledge for Entrepreneurs”, and so on.

### ***3.3 Specialized Offerings in Entrepreneurship***

Specialization packages on entrepreneurship and related topics in other courses and programs are offered by many universities in order to stimulate entrepreneurship among the participants of such courses/programmes. Such packages are made available within MBA programmes, healthcare-related programmes, social work and community development programmes, technology management programmes, and so on. Special emphasis is given in these packages on topics like business plan preparation, family business management, business and commercial law, healthcare management, entrepreneurship opportunities for the disabled and underprivileged groups, programs on women’s enterprise, programs on technology-based entrepreneurship, and apprenticeship with entrepreneurs.

### ***3.4 Entrepreneurship Skill Development***

Skill development is a component in almost all types of programmes for entrepreneurs. However, there are some programmes having an exclusive focus on skill development. The commonest among these is the incubator programme, wherein participants are helped with low-cost facilities and access to resources for developing and implementing their business ideas. Another initiative in this regard is the preparation of business plans by the students, which can be entered for a competition or be critiqued and evaluated by experts including the faculty. There are also built-in skill development modules as part of entrepreneurship courses, where students are asked to take up live projects often using a seed money assistance given to them. They are also encouraged to have internship with entrepreneurs and other experts as part of their course.

### ***3.5 Real-Life Entrepreneurial Opportunities***

The programmes classified under this group are very similar to the ones listed under Sect. 3.4 above. Students are supported for engaging in real-life businesses, which they would carry on beyond their course. The support provided are similar to those under skill development programmes, namely, seed money assistance, internship with entrepreneurs and other experts, incubation, technology commercialization, investment and fund management activities, and so on.

### ***3.6 Distance Education Programmes Through the Electronic Media***

The latest trend in entrepreneurship education is to use the electronic media to increase the reach and flexibility of these programmes. There are mainly three types of technologies or their combinations being used in such programmes:

- (a) Web-based programmes, which are totally asynchronous and therefore offer complete flexibility to the learner in terms of time as well as place.
- (b) Interactive CDs in combination with Web-based as well as physical contact sessions, which might reduce the flexibility to some extent but minimize the problems of Web access, if any.
- (c) Video-based transmission of lectures and synchronous interaction as an extension of the class room, which offers practically no flexibility on the timings and limited flexibility on the place but eliminates the need for travel and promotes more effective (quasi face-to-face) interaction than on the Web.

Such technologies can be used for delivering lectures, organizing discussions, developing and discussing (live) case studies, interacting with entrepreneurs and other experts, accessing the shared databases, and so on. The main advantage of such technologies is that they would offer the much needed flexibility to the entrepreneur as well as reduce the cost of accessing the learning inputs.

## **4 Conclusion**

The innovations that universities and higher education institutions are doing in their attempt to teach entrepreneurship are in response to a felt need from the client group. SME entrepreneurs are different from corporate executives both in their perception of training needs and in their ability to spend time and money on it. In a large-sample study involving 300 randomly selected SME units conducted by the NS Raghavan Centre for Entrepreneurial Learning (NSRCEL) at the Indian Institute of Management Bangalore (Manimala and Kumar 2012), it was found that SMEs'

interest in training and their ability to afford it are fairly low. This is probably because the respondents were thinking primarily about the conventional types of training and education. The more important findings from this study are reproduced below:

- 38% of the sample felt that SMEs do not need any training at all, while 47% admitted that they need training in some areas. It was only 15% who acknowledged the need for training without any reservations. Among these, it was the medium-sized firms who strongly felt the need for training, which supports the obvious argument that the number of employees has a direct influence on the perceived need for training.
- The priority areas for training for the directors are: marketing (38%), finance (27%), quality assurance (18%), leadership skills (18%), technology management (17%), venture capital and funds management (16%), networking skills (16%), selling skills (16%), negotiation skills (15%), and so on. For the managers, they are: finance (24%), team skills (18%), quality assurance (12%), and marketing (10%). And for the employees, they are: team skills (21%), quality assurance (19%), interpersonal skills (10%), and production management (8%).
- SMEs are not interested in long-duration training programmes conducted away from their premises. The most preferred duration is 2–4 h, preferably on weekends. There is a clear preference for short on-campus training programmes.
- The most preferred training provider is individual trainers and consultants (30%), followed by training institutes (28%), consultant organizations (17%), universities (7%), and industry associations (7%). It may be noted that universities are among the least preferred training providers, reinforcing the perception of mistrust or mismatch.
- Although the SMEs in our sample have expressed preferences for certain types of programmes and training providers, their actual behaviour is illustrative of the gap between the “espoused theory” and “theory-in-use”. For example, the actual training providers (as per the responses to a specific question on this) are the accountants, family members, colleagues in the industry, technology associates, and the like. There is hardly any use of professional training providers or educational institutions. As for the participation in external programmes, it is only 6% of the directors, 3% of the managers, and 1% of the employees who have ever undergone any such training!

The picture that emerges from the study is not very different from the stereotypes doing the rounds. Though there is some acceptance of the need for training at the conceptual level, the behaviour of SMEs does not support their words. Some of them were candid on this, as they clarified that the “need-statement” is for the general population, not for themselves. Several are the reasons stated for the SMEs’ disinclination towards training.

- Self-confidence arising from past successes and the belief that what could be accomplished in the past can be continued without any additional learning inputs.



- Perceived irrelevance of the offerings by some of the educational/training institutions.
- Lack of tangible effects of training in the short term, and the priority given to the tangible and immediate needs of day-to-day management.
- Inability or unwillingness to pay for the programmes (reinforced also by an erstwhile culture of government subsidizing SME training).
- Inability to leave one's business for attending long-duration programmes conducted during office-hours on working days.
- Apprehension that the trained employees might leave the firm for better opportunities.

While all these constraints and apprehensions are genuine, there are enlightened entrepreneurs who recognize the need for training especially in the growth phase of their ventures. The need arises both from the internal exigencies of growth and from the external dynamism of the environment. It should not be perceived as resulting from the personal inadequacy of the entrepreneur. With the development of the economy, there will be more demand from SME entrepreneurs for appropriate training programmes. Our experience at the NS Raghavan Centre for Entrepreneurial Learning (NSRCEL) at IIM Bangalore is that the demand for appropriately designed programmes for SMEs is on the increase and the participants' feedback on such programmes is very positive. The challenge for the universities and higher education institutions is to design flexible, short-duration and modular programmes offered at realistic timings and affordable costs for the SME entrepreneurs.

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