

Designing Entrepreneurship Education and Training Program: In Search of a Model

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Abstract

Recently entrepreneurship education has received enormous attention from the researchers, academicians and policy makers. However, still there is lack of agreement about the definition, objectives, contents, approaches of delivery, and the characteristics of the facilitators of entrepreneurship education programs. This paper attempts to synthesize the existing literature on the entrepreneurship education and outline a model for entrepreneurship education program. The proposed model provides a recipe with the most crucial ingredients of an entrepreneurship development program in terms of trait, skill and knowledge content (what is to be taught?) as well as approaches of teaching (how it is to be taught?) and the essential features of the facilitators (Who should teach?).

Keywords: Entrepreneurship, education, training, trait, skill, knowledge.

1. Introduction

Entrepreneurship education has received enormous attention from the researchers, academicians and policy makers in recent years. In the face of crisis in the corporate world and heightened unemployment, many governments emphasize on entrepreneurship as an alternative way out. Moreover, unprecedented enthusiasm is also observed from the demand side as well. Educated youths as well as dropouts from high schools or colleges are found interested to equip themselves with entrepreneurship knowledge and skill, viewing it as a lucrative career alternative. As a result, intervention in the form of entrepreneurship education and training has become a common scenario in almost all countries, developed or developing.

Garavan and O'Conneide (1994a) point out that the observation that the entrepreneurial role can seemingly be culturally and experientially attained, in some way gives support to the view that it might also be influenced by education and training programs. For long, it has been believed that some people are born entrepreneurs and will succeed with or without education, and people lacking in entrepreneurial spirit cannot achieve business success through education. But, experience reveals that people are enrolling for courses to learn about entrepreneurship, and there is an increasing recognition that entrepreneurship can be taught and learned (Gottlieb and Ross, 1997). Entrepreneurial education has categorically established a foothold in academic world due to a change in belief about the significance of this field. It is now recognized that entrepreneurship is an important educational innovation that facilitates *learning about learning* (Charney and Libecap, 2003). In arguing for entrepreneurship education, Onstenk (2003) articulates that even if it does not turn students into entrepreneurs, it will prepare them better for employability and active citizenship.

However, even though there is widespread interest and enthusiasm in entrepreneurship education, still there is lack of agreement about the definition, objectives, contents, approaches of delivery, and the characteristics of the facilitators of entrepreneurship education programs. This paper attempts to synthesize the existing literature on the entrepreneurship education and outline a model for entrepreneurship education program in terms of content, approaches and facilitation.

2. Definition and objectives of entrepreneurship education

Entrepreneurship education is rendered with multiple objectives ranging from personal skill development to innovative venture creation and target audiences are drawn from diversified backgrounds and levels of education which results in multiplicity of its definitions. Bechard and Toulouse (1998, p. 320) define entrepreneurial education as "*a collection of formalized teachings that informs, trains, and educates anyone interested in participating in socioeconomic development through a project to promote entrepreneurship awareness, business creation, or small business development.*" Gottlieb and Ross (1997) emphasize on creativity and innovation. According to them, "Entrepreneurship education should be viewed broadly in terms of the skills that can be taught and characteristics that can be engendered in students that can help them develop new and innovative plans. It focuses on the features that are needed to conceive of and start up a brand new business venture."

David A. Kirby (2004) refers entrepreneurship education to activities aimed at developing enterprising or entrepreneurial people and increasing their understanding and knowledge about entrepreneurship and enterprise. Kourilsky (1995) views entrepreneurial education as “opportunity recognition, marshalling of resources in the presence of risk, and building a business venture”. The Working Group (EC, 2002) on European Best Procedure Project on Education and Training for Entrepreneurship spells it out as “*Teaching and learning about entrepreneurship involve developing knowledge, skills, attitudes and personal qualities appropriate to the age and development of the pupils or students.*” OECD provides a simple definition of Entrepreneurship education based on single objective of venture creation as it says, “Enterprise education is the teaching of business entrepreneurialism and the skills needed to start a business” (OECD, 1989).

Based on above deliberations it can be deduced that the notion of entrepreneurship education may include two different elements: (1) A sweeping concept of *education for entrepreneurial attitudes and skills*, which involves developing certain personal qualities that may be applied in practice within the domain of self-employment, business initiation or employment in the large organization and is not directly focused on the creation of new businesses and (2) A more specific concept of *training in how to create a new business*.

However, as the general term “entrepreneurship” essentially entails initiating and running a venture, any entrepreneurship education or training program must aim for knowledge, skills and competencies to start a business, preferably an innovative business. Without this overriding objective, it will be a misnomer.

3. Contents of entrepreneurial education and training

Depending on the objective, duration, target audience, resource availability and perceived efficacy of the program a multiplicity of contents for different entrepreneurship education and training programs can be observed.

According to Sexton and Kasarda (1992) entrepreneurship education should include material which will: (1) convince his/her student to become actively involved in entrepreneurship; (2) understand the dynamic nature of the world of entrepreneurship; and (3) slow down the reality shock of the real world by means of formal or informal tuition. Cox (1996) believes that a primary objective of training interventions targeted at the awareness stage of entrepreneurial development is the promotion of self-efficacy with regard to new venture creation. Instruction at this stage, therefore, should seek to provide mastery experiences or opportunities to act entrepreneurially, as well as exposure to several real-life entrepreneurs. He suggests that the main focus of training intervention at the startup stage should be to heighten students’ resolve to become entrepreneurs. Accordingly instructional emphasis should be on the development of a viable business plan which should be supported by individualized assistance in the form of financing, networking, or counseling.

In their European-wide evaluation of six entrepreneurship programs across five European countries Garavan and O’Cinneide (1994b, p.15) conceptualized the contents of the six programs in terms of three components, viz. *formulation, development and implementation* of the business idea. The formation stage of the six programs generally emphasized knowledge acquisition in such areas as knowledge and contextual information on the business world, the nature of entrepreneurship, the characteristics of effective teams and the nature of business transactions and activities. The development stage had a more skills and attitudinal emphasis. Content issues which received special emphasis here included business planning, market selection, financial planning, product identification and making financial presentations. The business implementation stage had a general knowledge and attitude emphasis. Key content areas which were dealt with in all of the programs included financial planning, managing company growth, management functions and attitudes and making the transition from entrepreneur to manager.

Hisrich and Peters (1998, p. 20) group various skills required by entrepreneurs into three: (1) Technical skills: includes written and oral communication, technical management and organizing skills; (2) Business management skills: includes planning, decision-making, marketing and accounting skills, and (3) Personal entrepreneurial skills: includes inner control, risk taking and innovation. Le Roux and Nieuwenhuizen (1996) consider that the views of participants should be the basis for the development of a small business training program. Through a survey of 220 aspiring and developing entrepreneurs, they identified marketing, entrepreneurship, business planning, management and financial management are the most important areas to be highlighted in an

entrepreneurship development program.

Preparation and mastering on Business plan occupy a central place in most of the entrepreneurship development programs. Timmons et al. (1987) suggest that there is a limit to what can be taught in entrepreneurship training programs and that the only way to learn is through one's own personal experience. To this end, they view the quality of the resulting business plan as a key measure of effective experiential learning.

Brown (2000) notes that entrepreneurship needs to be defined more broadly than small business management, as it includes creativity, risk taking, and innovation. Thus the entrepreneurial education should teach the skills and characteristics that will enable the participants to develop new and innovative plans. It should focus on the expertise that facilitates conception as well as commercialization of a new business opportunity. He recommends the following essential curricular components that can be applied in any setting where entrepreneurship education is needed - schools, community groups, or private instruction:

(A) Learn to develop ideas by: (1) Learning to recognize business opportunities; (2) researching customer insights; (3) understanding the needs of the market in terms of services, products, and price; (4) conducting a self-assessment of personal creativity; (5) conducting a feasibility study and (6) identifying various business entry strategies.

(B) Prepare to start a business by: (1) Assessing personal resources and financial status; (2) researching and evaluating the risks necessary to get started; (3) writing a working business plan; (4) approaching others for money and other resources.

(C) Build a viable business by: (1) Learning to allocate resources; (2) using various marketing strategies and (3) managing money and personnel.

Objectives mentioned by Roach (1999) for the entrepreneurial course at North Georgia Technical Institute include: (1) knowledge of the characteristics of an entrepreneur; (2) ability to recognize business opportunities; (3) basic skills and knowledge to create an effective feasibility plan for a business venture; (4) ability to identify the various business entry strategies available to entrepreneurs; and (5) understanding of the skills needed and means available to collect the market information needed to evaluate the feasibility of a new business concept. Kourilsky (1995, p.9) categories entrepreneurship curriculum into three groups: *recognition of market opportunity*, *the marshalling and commitment of resources*, and *the creation of an operating business organization*. *Recognition of market opportunity* involves the identification of market needs and the creation of ideas for services or products to meet them. It necessitates observation of the market, delving into customer needs, invention and innovation. *Marshalling resources* involves an enthusiasm in taking risks as well as skills in obtaining outside investment. *The creation of an operating business organization* to offer the product or service includes financing, marketing, and management skills.

Noll (1993) emphasizes on the behavioral characteristics of entrepreneurs which can be equally applied in government, business, or not-for-profit ventures. He spells out an entrepreneurship education program with the following curriculum focus. First, learn to develop ideas by recognizing business opportunities, researching customer insights, conducting a self-assessment of personal creativity, conducting a feasibility study, and identifying various business entry strategies. Second, prepare to start a business by assessing personal resources and financial status, researching and evaluating the risks necessary to get started, writing a working business plan, and approaching others for money and other resources. Finally, build a viable business by learning to allocate resources, using various marketing strategies, and managing money and personnel.

Vesper and Gartner (2001), based on the literature and a global survey of 128 university entrepreneurship programs adopted the objectives illustrated in Table 1 as the basis for designing an entrepreneurship curriculum.

Table 1. Personal and enterprise development objectives

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

Source: Vesper and Gartner (2001).

Rae (1997, p 199), maintains that the skills traditionally taught in business schools are necessary but not adequate to make a successful entrepreneur. To him, more attention needs to be paid to the development of their entrepreneurial skills, attributes and behaviors. According to Rae (1997), an entrepreneurship education course should include communication skills, especially persuasion; creativity skills; critical thinking and assessment skills; leadership skills; negotiation skills; problem-solving skills; social networking skills; and Time-management skills.

Onstenk (2003) based on the existing literature on the characteristics and competencies of an entrepreneur, distinguished three main themes: (1) enterprising key skills: It includes motivation, need for autonomy and independence, creativity and originality, taking initiative, risk taking, looking for possibilities, posing challenging objectives, self-confidence, internal locus of control and endurance; (2) the entrepreneur as manager: It includes operational management, personnel and organization, financial administration, marketing, financial management, making a business plan and change management and (3) the entrepreneur as entrepreneur: Includes recognizing business opportunities, interpretation of market information, the development of customer orientation, the development and effective operation of relation networks and the building of an innovative organization.

Based on the International Consortium for Entrepreneurship Education (ICEE, 1998), Gibb (1998) and Tolentino (1998), make out the following competencies: (1) the ability to recognize and analyze market opportunities; (2) the ability to communicate, identify mentally, persuade and discuss with customers, clients, suppliers, competitors, service providers and other stakeholders in the business environment; (3) networking, the ability to establish linkages with other business persons and other stakeholders for mutual learning, collaborative undertakings and other joint activities, aimed at achieving common objectives; and (4) integrating enterprising key skills with the fundamental ability to deal with the life world of entrepreneurship. Entrepreneurs must be able to live with daily insecurity and even enjoy that situation. The entrepreneur has to develop personal entrepreneurial behavior and characteristics, learning effectively from business interactions.

Hansemark (1998, p.33) observes that the fundamental purpose of the entrepreneurship program is to develop *abilities, knowledge, skills, attitudes, and personal attributes* important for the entrepreneurial activity. *Abilities* comprise seeing possibilities, creating reliable business plans, building personal networks, creating financial resources, building an organization to realize the business idea and implementing it on the market, and making a good choice in startup timing and location. *Knowledge* includes knowledge of marketing, business law, business economics and sources of finance. Important *skills* contain creativity, planning, oral presentation and argumentation, decision making, and interpersonal skills. According to Hansemark (1998) the goal for the program also includes learning about the cultures, norms, values and attitudes in which the entrepreneur works. Finally, he maintains that one of the focuses of the entrepreneurship program should be to develop the participant's psychological characteristics, specifically, Need for Achievement and Locus of Control.

Therefore, from a good pool of opinions of experts and practices of existing programs, it is obvious that entrepreneurship education may take place with great variety of objectives and corresponding multiplicity of contents. The contents may include a wide assortment of options like concept and value of entrepreneurship, characteristics of an entrepreneur, creativity and innovation, networking, negotiating and deal making,

identifying and evaluating opportunities, conducting a feasibility study, commercializing a concept, developing entry strategies, constructing a business plan, finding capital, initiating the business, growing the business, marketing, financial management, and managing personnel.

4. Approaches to teaching entrepreneurship

The efficacy of an education/training program largely depends on the mood of delivery of the educator/training. McLuhan's (1967) famous argument that the "medium is the message" emphasizes the importance of the learning methods in relation to the content. The modes of teaching entrepreneurship vary noticeably from lectures, group discussion, printed text, video to case study, role play, simulation and games and competition. Hytti et al. (2002, p.52) in their study of 60 European Entrepreneurship Education and Training programs identified a variety of teaching methods like lectures, taking written exams, Workshops, Counseling/ mentoring, Study visits, Setting up a business, Games and Competitions, case study, computer assisted simulation and internship.

Davies and Gibb (1991) criticize the use of traditional methods like lectures, written exam etc. which emphasize primarily on theory and a didactic approach. They consider them "inappropriate" in entrepreneurship education. Young (1997) also questions the relevance and value of a theoretical approach in teaching entrepreneurship which, almost exclusively deals with activity. He views that the experience and practical skills used by entrepreneurs cannot be acquired through conventional teaching methods (Henry et. al. 2005). Kourilsky and Carlson (1996) stress that a crucial part of an enterprise education program is actual decision making which requires learners to bear the consequences of their decisions. Kourilsky (1995) emphasized that students must secure personal experience as regard to the market opportunity, generation of business idea, and the challenges involved in the process of organization building.

Breen (1999) proposed a "best practice model" in Australia for delivering enterprise education where he draws attention to the use role models, community and business links, hands-on activities, involvement of the teacher as a facilitator, and learning under conditions of uncertainty. He also suggests that the programs should be predominantly learner driven, the student needs to be the active agent, and such programs should explicitly facilitate transference of the learned knowledge and skills to the real life. .

Gibb (1987a) suggests that the education system should emphasize a set of values and abilities which is complimentary to the entrepreneurial spirit. Davies and Gibb (1991) suggest that employing traditional education methods to develop entrepreneurs could be interpreted as teaching "to drive using the rear mirror". According to them the students of entrepreneurship program should be encouraged to cope in new ways with the real world by emphasizing: (1) learning by doing; (2) encouraging participants to find and explore wider concepts relating to a problem from a multidisciplinary viewpoint; (3) helping participants to develop more independence from external sources of information and expert advice, and to think for themselves – thus giving ownership of learning; (4) encouraging use of feelings, attitudes and values outside of information which, in turn, will place greater emphasis on experience-based learning; (5) providing greater opportunity for building up of networks and contracts in the outside world linked with their learning focus; (6) helping participants to develop emotional responses when dealing with conflict situations, and encouraging them to make choices and commitments to actions in conditions of stress and uncertainty.

According to Kirby (2004, p.515), to succeed in entrepreneurship education, it will be necessary to create a learning environment that changes the way students learn and reinforces the development of entrepreneurial skills. He considers the role of two hemispheres of the brain viz. left side and right side in human thought process and actions. According to him, "The left side handles language, logic and symbols. It processes information in a step by step fashion. Left-brain thinking is narrowly focused and systematic, proceeding in a highly logical fashion from one point to the next. The right side takes care of the body's emotional, intuitive and spatial functions. It processes information intuitively, relying heavily on images. Right-brained thinking is lateral, unconventional, unsystematic and unstructured. It is this right-brained lateral thinking that is at the heart of the creative process." The study by Nieuwenhuizen and Groenwald (2004) on the brain preference profiles of entrepreneurs primarily confirms that the successful entrepreneurs prefer to use right hemisphere of the brain than non-entrepreneurs. It, somewhat, explains why many successful entrepreneurs fail to do well in the formal education system (Kirby, 2004). Perhaps based on this notion of brain preference, Gibb (1987b) argued that to

develop entrepreneurs or more enterprising individuals, the focus of the education system needs to be changed from the 'traditional' to 'the Entrepreneurial' which is illustrated in the following table (Kirby, 2004).

Table 2. Traditional Vs. Entrepreneurial Focus

| Traditional focus on | Entrepreneurial 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 | Problem or opportunity |

Source: Gibb (1987b) cited from Kirby (2004)

Godtfredsen (1997, p.17) believes that the young entrepreneurs are impatient. According to him, "They have often what is called a 'fire-in-the-belly'. They want to make their mark, pursue opportunities, and express their independence. This becomes a major challenge for educators who rely on the traditional educational methods such as on lectures only to convey information and who depend on end-of-the-semester examinations." These traditional approaches to teaching are unlikely to be effective to stimulate entrepreneurial thinking. According to Godtfredsen (1997, pp.17-18), "entrepreneurship is by nature participatory. Success in an entrepreneurial venture cannot be measured by a written examination at the end of the year. It might be measured by the quality of a business plan." Thus Godtfredsen (1997, p.18) argues that how "classes" are structured, the nature of the subject matter, the methodology of the 'lecturer' etc. need to be reconsidered in order to build a more practical and effective program. He emphasizes that the Educators need to re-learn how to teach if they want to be effective. Day to day participation and involvement must be highly valued rather than end of the year exams.

Entrepreneurship is an art which needs to be demonstrated in the real life. So the teaching methodology used in the classroom should be more like that of an art school where students are encouraged to develop their creativity (Godtfredsen 1997, p.19). Here emphasis should be on Case studies, group work, brainstorming etc. In fact, in teaching entrepreneurship the educator needs to be skilled not on providing the "right" answer but in helping students explore alternatives and thinking them through (Godtfredsen 1997, p.19). One very useful method mentioned by Godtfredsen (1997, p.20) that is to get students to select an entrepreneurial firm and evaluate it as a group. This brings reality into the classroom and much excitement, especially if the CEO of the firm comes to the classroom to witness the evaluation and respond to the criticisms and suggestions of the students.

In an attempt to assess alternative approaches to teaching entrepreneurship, McMullan and Boberg (1991) conducted a survey amongst current MBA students and alumni at the University of Calgary to compare the case method of teaching with the project method. They discovered that the students felt the case method was effective in developing analytical skills and the ability to synthesize information whereas project method was perceived to develop and enhance knowledge and understanding of the subject area, as well as the ability to evaluate, and were felt to be more effective in teaching entrepreneurship.

Undoubtedly, there is overwhelming emphasis on active approach of learning in entrepreneurship education. However, it should not necessarily be at the expense of theory. Fiet (2000a) advocates that those involved in teaching entrepreneurship should increase the theoretical content of their courses in order to develop in students the cognitive skills necessary to make better entrepreneurial decisions.

Thus, the major challenge of education and training in relation to entrepreneurship is the appropriateness of curricula and the approaches used for teaching/training. It is well documented that the traditional didactic method of teaching based on lecture and written tests are not adequate to serve the purposes of making participants either entrepreneurial or entrepreneur. The commentators now approvingly speak for entrepreneurial focus on the teaching method and stress the significance of non-traditional pedagogy like workshop, case study,

project, simulation, competition, role play, creative exercise, experimentation, internship, mentoring/counseling, interaction with the entrepreneurs etc. as more suitable methods in teaching entrepreneurship.

5. Role of “teacher/trainer” in entrepreneurship education and training

One very plausible area of concern regarding Entrepreneurship Education/Training is the role of teacher/trainer in the program. Fiet (2000a) highlights the critical role of the “teacher” in the pedagogy of entrepreneurship training as a facilitator to bring about attitudinal and behavioral modification in the participants for business start up. Teacher’s motivation, skill, experience and values are all important ingredients for program success.

Meyer (2001) in his keynote speech in the 2001 USASBE/SBIDA Joint National Conference postulates that the experience and interpretations of faculty and administrators in the traditional control-oriented finance and accounting disciplines create an ideological gap with teachers and researchers of entrepreneurship. According to him, “The value systems tend to be quite different between the two groups of scholars. Entrepreneurship teachers (should) value the creation process, which is in alien juxtaposition to those who find control all important. And control is the fundamental basis of bureaucracy. Of course, there is a needed balance between structure and chaos, but freedom is necessary for entrepreneurship and creation to thrive. These conflicting value systems will also determine approaches to teaching and learning” (Meyer, 2001, p.3). Lewi and Massey (2003) point out that the emphasis on student-centered learning, and the strong “ownership” of the Entrepreneurship learning experience by the student poses a problem for many teachers who have been trained in more traditionally didactic methods.

Garavan and O’Cinneide (1994b, p.17) identified a multiplicity of roles to play by the program facilitators in entrepreneurship training. The key roles usually adopted are those of counselor, coach, mentor, consultant, role model and guide. Some of the roles are performed simultaneously. Their study of six European entrepreneurship training programs found that *role model*, *counselor* and *consultant* were the dominant roles played/performed by the associated facilitators.

Godtfredsen (1997) feels that the entrepreneurship educator must have skills that may stand outside the usual mode of teaching. Since an entrepreneur is expected to be flexible, imaginative, willing to take risks, and willing to go through trial and error, the teachers must be prepared to abandon the rigid role of information provider, lecturer, and one who knows all the answers (Godtfredsen, 1997). In fact, without the enthusiasm and active involvement of teacher/trainer it is unlikely that much development would be achieved in this area. A lack of motivated and trained teachers thus creates a barrier to the implementation of entrepreneurship courses and programs. Given the central role of facilitators in the process of entrepreneurship training one may raise the questions: “Can people without business experience facilitate entrepreneurial education successfully?” Perhaps, considering the crucial role of teacher in Entrepreneurship Education/Training and their scarcity in the traditional didactic education system, many business schools are hiring good number of non-track adjunct faculties having exposure to the real life entrepreneurship (Meyer, 2001). Godtfredsen (1997, p.20) recommends for developing a teaching culture within the business schools to build up a competent pool of entrepreneurship faculty. Special recognition, financial rewards, teacher workshops, visitations, case writing for teaching, case research, and collegial cooperation can form part of such a culture so that teachers have to want to learn new ways.

The above notes on facilitators indicate that for making an Entrepreneurship Education/Training program successful, a facilitator has immense role to play. It is important that he/she should be sufficiently motivated, have practical exposure to business, have adequate education and training and more importantly he/she should have strong conviction about entrepreneurship as a viable career option for the participants. Simultaneously the facilitator should wear multiple hats of teacher/trainer, counselor, mentor, coach, guide and role model.

6. Proposed Model

Addressing the difficulty in deciding the objectives and contents of entrepreneurship education, Garavan and O’Cinneide (1994a, p. 5) hypothesize that while virtually every career in business involves some combination of knowledge, technique, and people skills, few involve the integration and combination of all functional knowledge and skills to the extent that entrepreneurial activities does. Consequently it should not be expected that one or two courses/training on entrepreneurship will instill all the necessary knowledge, skill and competencies required by an entrepreneur. That’s why there is considerable debate over the most appropriate method of measuring the effectiveness of entrepreneurship programs (Westhead et al. 2001). Indeed, there does

not appear to be a standard methodological approach to evaluation, nor does there exist a common set of evaluation criteria for determining effectiveness (Wan, 1989; Henry et al, 2003). Wyckham (1989) has noted that there has been difficulty in identifying appropriate output measures of programs as well as determining causality. In fact, few surveys actually evaluate the impact a particular program has had on new venture creation following its completion. Instead most entrepreneurship program evaluations measure such variables as instructor's knowledge, preparation and presentation style, as well as the degree of difficulty and level of interest of the program itself. McMullan et al. (2001) suggest that even though designing a methodology to evaluate programs and courses is comparatively easy, it is more difficult to ensure that the approach adopted is actually valid.

In fact, the evaluation of an Entrepreneurship Education/Training program is compounded by a multiplicity of factors like what indicators to measures, how to measure, the time dimension involved in the occurrence of various indicators etc. Moreover, a number of exogenous variables like, cultural aspects, role model, prior experience, institutional settings etc. have a grave bearing on shaping the outcome of the program. For this reason, many study projects mainly focus on indicators of effort (*input*), rather than indicators of impact (*output*) (Hytti et al. 2002). This particular concern focuses on the evaluation of an Entrepreneurship Education/Training program based on *inputs* like, the contents included in the program curriculum, approaches of teaching employed, the attributes of the facilitators etc. instead of focusing on *outputs* such as, number of businesses created, or increase in the employment or profit in the participants' enterprises as more convincing assessment attempt of such a program. This, in other words, highlights the gravity of the design of the program. It's like cooking food; if the recipe includes all the ingredients in right proportion, if the cook is competent and if there is right equipments/facilities in place, one can expect to have tasty food.

As the prime objective of any entrepreneurship program is to prepare the participants for creating and running a venture, in general and innovative venture, in particular, the design of the program should reflect this. Based on extensive survey of literature on Entrepreneurship Education & Training, we can contemplate an Entrepreneurship Education Model. Considering the importance of efforts (inputs) in determining the effectiveness of an Entrepreneurship Education Program, the Model is developed on the basis of three key inputs viz. Contents (what is to be taught?), Approaches (how it is to be taught?) and Facilitation (Who should teach?). The content of the program is further divided into three major components of traits, skills and knowledge. Thus the model takes the following form.

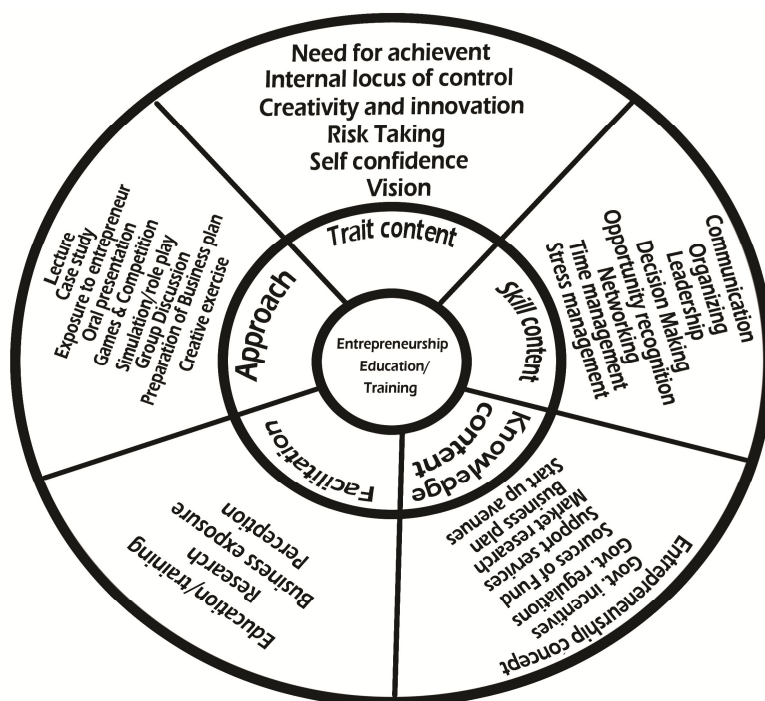


Figure 1: Entrepreneurship Education/Training Model

6.1 Assumptions of the Model

Main objective of the program is to prepare the participants for creating a venture, in general and innovative venture, in particular. The participants are expected to learn different functional areas of Management like production management, financial management, human resources management etc. through other courses. The duration of the program may vary from 1 day to several months. However, for shorter duration less varieties of approaches are be used.

6.1. Content of the Program

Content of the course includes three major areas: *traits*, *skills* and *knowledge*. The components of the content are described below.

6.1.1. Traits

Traits are the psychological characteristics of an individual which represent a person's unique values, attitudes and needs that differentiate one person from others. According to Garavan and O'Connell (1994b) these psycho-social forces of the individual and the cultural context, is of prime importance in influencing innovative and entrepreneurial behavior patterns. The researchers on entrepreneurship have so far identified a wide range of traits that can be attributed to the entrepreneurs. Thus in view of the importance of traits in determining the entrepreneurial behavior, the model emphasizes on the development of at least, a few most sought after traits in the participants through the program. Even though it is believed that traits are mostly biologically determined by the inheritance, or may be developed at the early stage of life, proper training and different student-centered approaches of teaching like role play, games and competition, creative exercise, exposure to role model etc. may develop these characteristics, at least, to some extent. The traits included in the model are: Need for Achievement (nAch), Internal locus of control, Creativity and innovation, Risk Taking, Self confidence, and Vision.

Need for Achievement (n-Ach) (McClelland, 1961) is a strong psychological driving force behind human action has long been proposed as a factor influencing entrepreneurial behavior (Shaver and Scott 1991, Johnson 1990, Robinson et al. 1991a; Robinson et al. 1991b). Locus of control represents an individual's perceptions about the rewards and punishments in his/her life (Pervin 1980). Empirical findings support the link between internal locus of control and entrepreneurship (Ho and Koh 1992; Robinson et. al 1991a). Risk-taking propensity can be defined as the inclination of a person towards taking chances in the context of uncertainty. Mill (1984) suggests that risk bearing is the key factor in distinguishing entrepreneurs from managers, and it is widely believed that the entrepreneurial function primarily involves risk measurement and risk taking (Palmer, 1971; Liles, 1974; Sarachek, 1978). An entrepreneur is expected to have a perceived sense of self-esteem and competence in conjunction with his/her business affairs (Robinson et. al. 1991a). Ho and Koh (1992) have suggested that self-confidence is a necessary entrepreneurial characteristic and that it is related to other psychological characteristics, such as internal locus of control, propensity to take risk and tolerance of ambiguity. Innovativeness relates to perceiving and acting on business activities in new and unique ways and is one of the recurring themes in defining entrepreneurship (Cunningham and Lischeron 1991; Vesper 1980; Gartner 1990). As suggested by Schumpeter (1934), innovativeness is the focal point of entrepreneurship and an essential entrepreneurial characteristic. An entrepreneur must have vision if his/her new venture is to become a reality. Wickham (1989) refers to vision as the entrepreneur's personal picture of the new world that the entrepreneur seeks to create. Vision is strongly linked to confidence and motivation, since it is the entrepreneur's belief in his/her own ability to put the original idea into practice that enables the business to reach set-up stage and beyond (Henry et al. 2003).

6.1.2. Skills

"Skill is the ability to perform a task or activity consistently over a period of time. It is viewed as the expertise required for a particular task or occupation which may include manual dexterity and/or mental aptitude" (<http://www.ntatt.org/glosary.html>). It contributes to the effective performance of a task. The job of an entrepreneur is overwhelming. It encompasses a number of activities involving human interaction, resource accumulation, team building, disturbance handling, consistent problem solving and what not. All these call for an entrepreneur to be master in a number of skills. Consequently several crucial skills are included in the Model. In fact, teaching skills requires certain approaches other than traditional lecture method. Teaching a skill is more

objective and tangible in nature than trying to teach an insight. Here the focus should be on the learners. The facilitator should try to help the participants gain the skill and be able to use it with a sense of comfort and confidence. Thus teaching skill includes explanation, demonstration as well as practice. More emphasis on role play, simulation, games and competition, presentation, project work etc. is more likely to develop skills in the participants. Skills in the Model includes: Communication skill, Organizing skill, Leadership skill, Decision Making skill, Opportunity recognition skill, Networking skill, time management skill, and Stress management skill.

According to Webster Online Dictionary, “Communication skill is the basic ability required in nurturing relationships, building a good business and in every aspect of human interactions”. The studies of Hisrich and Peters (1998), Rae (1997), Onstenk (2003), Gibb (1998) and Tolentino (1998) consider it as an important skill to be included in the entrepreneurship curriculum. As a critical skill for entrepreneurs, *organizing* refers to arranging work activities in such a way so as to achieve the objectives established by planning. Beaver and Jennings (1996) emphasize the need for entrepreneurs to have good managerial (organizing) skills when they suggest that the root cause of small business failure is poor managerial competence.

The entrepreneurs as the leader of the venture have the responsibility to create a congenial culture in the organization where the employees can work with mutual understanding, co-operation and trust. That’s why Hisrich and Peters (1998) and Rae (1997) presume *leadership skill* to be included in the entrepreneurship curriculum. In considering the peculiarity of entrepreneur’s decision making approach, Bhide (1994) suggests, “Whilst entrepreneurs do not take risks blindly, they use a quick, cheap approach that represents a middle ground between planning paralysis and no planning at all. They don’t expect perfection.Compared to typical corporate practice, however, the entrepreneurial decision making approach is more economical and timely.” Therefore, decision making is an essential skill for an entrepreneur. Spotting the opportunities and exploiting them in the right time is fundamental of entrepreneurship. Drucker (1985) and Bhide (1994) see the ability to seize short-lived opportunities and execute them brilliantly, as being far more important for entrepreneurial success than the ability to develop long-term competitive strategy. An entrepreneur deals with multiple aspects of business and face innumerable situations that call for information and assistance from different sources. A strong network will definitely put him/her in an advantageous position than the person who does not have it (Rae, 1997; Onstenk, 2003; Gibb, 1998; Tolentino, 1998; Hansemark, 1998; Kourilsky, 1995; Roach, 1999; Jones and English, 2004). Entrepreneurs have to do many jobs on their own as a result they always feel time urgency and require astute time management. Rae (1997), in his study highlights the need for time management skill to be included in the entrepreneurship course. In fact, as the architect and manager of the organization, entrepreneurs are likely to experience severe stresses in their work which may ultimately ruin their physical as well as mental strength to work and live. Therefore, Gibb (1998) considers it to be part of entrepreneurship development program.

6.1.3. Knowledge

According to Wikipedia (<http://en.wikipedia.org/wiki/Knowledge>), *Knowledge is the awareness and understanding of facts, truths or information gained in the form of experience or learning (a posteriori), or through introspection (a priori)*. To start a business, an entrepreneur comes across multifarious concepts, facts and information. The knowledge component of the model covers these aspects of the content of an entrepreneurship development program. Such knowledge can be transmitted through lecture, printed text, assignment, project work as well as other non-traditional pedagogic apparatus. Knowledge component of the Model includes: Entrepreneurship concepts, Government incentives, Govt. regulations, Sources of Fund, Support services, Market research, Business plan, and Start up avenues.

Entrepreneurship concepts include definition, functions, characteristics, process, theories, etc. of entrepreneurship. To provide a comprehensive understanding about entrepreneurship these components should be covered in any entrepreneurship education course (North Georgia Technical Institute, 1999; Garavan and O’Cinneide, 1994b; Le Roux and Nieuwenhuizen, 1996; Roach, 1999; Jones and English, 2004). As part of economic development endeavors, every government offers various incentives specific to size of investment, location, sector and period. Information about such government incentives may play a vital role in deciding about investment by novice entrepreneurs who are more likely to look for favorable treatment from the government. Therefore dissemination of such information through an entrepreneurship education course

deserves attention. Before starting a business, the entrepreneurs find it a black box as to what are the procedures to float a business, what documentations are required, from where to seek permission, what are the tax implications of starting a particular business etc. Providing this information in an entrepreneurship course certainly has its value to the potential entrepreneurs (EC, 2002; Jones and English, 2004). Fund is viewed as the most prominent bottleneck for the potential entrepreneurs to embarking on a venture. So the information regarding the informal as well as institutional sources of fund available to the novice entrepreneurs along with their costs, duration and other terms and conditions has a significant role to play in enhancing venture creation among the participants in an entrepreneurship education program (EC 2002; Hansemark 1998; Brown 2000; Jones and English 2004).

Entrepreneurs need various support services, like infrastructural facilities, counseling, training, market promotion, information etc to start and run their businesses. Both government and private organizations are found to offer these services. Having knowledge about such services makes the job easier for the potential entrepreneurs to ensure smooth start and efficient management of their businesses (Jones and English, 2004). A business survives in the long run if it is based on market reality. Only the products or services that promise a good market acceptance should be launched. Market research is the means to accumulate market information about competitors' position, promotional options, distribution networks and the demand of the product in terms of its size, design, price, etc. A good entrepreneurship development program must include this aspect of learning in the curriculum (North Georgia Technical Institute, 1999; Garavan and O'Conneide, 1994b; Onstenk, 2003; EC, 2002; Le Roux and Nieuwenhuizen, 1996; Brown, 2000; Roach, 1999; Noll, 1993; Jones and English, 2004).

Business plan is the road map for a new business. A well thought-out business plan guides the entrepreneur throughout the project. It is also essentially required to receive financing from different sources, particularly institutional sources. Given the magnitude of the subject matter, it is recommended by a host of studies to be essentially included in the Entrepreneurship curriculum (Timmons et al. 1987; North Georgia Technical Institute, 1999; Garavan and O'Conneide, 1994b; Onstenk, 2003; EC, 2002; Le Roux and Nieuwenhuizen, 1996; Brown, 2000; Roach, 1999; Noll, 1993; Jones and English, 2004). An entrepreneur can start the business through either Greenfield investment, or franchising or acquisition. In fact, in some cases, the nascent entrepreneurs prefer franchising or acquisition over investment from the scratch as it provides a better turn-key option for them. So focusing on Greenfield investment only provides a partial view of the whole picture. Therefore, knowledge about franchising and acquisition enhances their possibility of venture creation (Noll, 1993; Brown, 2000; North Georgia Technical Institute, 1999; Roach, 1999; Jones and English, 2004).

6.2. *Approaches of Teaching*

Approaches of teaching refer to how the traits, skills and knowledge outlined in the content are delivered to the participants in an entrepreneurship education program. Some commentators, such as Davies and Gibb (1991) for example, are critical of the adoption of traditional education methods, which focus mainly on theory and a didactic approach, suggesting that they are "inappropriate" in the teaching of entrepreneurship. Young (1997) supports this view when he questions the relevance and value of a theoretical approach to a subject which deals almost exclusively with activity, suggesting that the experience and practical skills used by entrepreneurs are possibly not something that can be acquired through conventional teaching methods (Henry et. al. 2005). Keeping this in view, the Model includes Lecture, Case study, Exposure to entrepreneur, Oral presentation, Games & Competition, Simulation/role play, Group Discussion, Preparation of Business plan and Creative exercise as the appropriate approaches for imparting entrepreneurship education.

Lecturing is the most traditional method of teaching where the teacher disseminates information, facts and thoughts through an oral presentation. It is essentially required for explaining something to the students. So it cannot be eliminated from teaching entrepreneurship. However, over reliance on this method of teaching will be counter effective as it is against the demand of entrepreneurial learning which is mostly inductive in nature (Hytti et al. 2002; Fiet, 2000a). Case study helps provide learning replicating the reality and consequently enhance the decision making ability of the students (Sternberg and Caruso, 1995). McMullan and Boberg (1991) found that the case method was effective in developing analytical skills and the ability to synthesize information.

Role model plays a vital part in deciding about the career of an individual. Boyd and Vozikis (1994) show that the degree of self-efficacy grows among the students due to the presence of an entrepreneurial role model which may eventually lead to venture creation. It boosts up their morale, and cheers them to overcome roadblocks. Life

story analysis of successful entrepreneurs may also serve the purpose to some extent. Making an oral presentation by the students in the class helps them to develop their communication and leadership skill. It drives away the phobia of public speaking and trains them to learn the art of presentation and persuasion. Students may be asked to present their business plan in front of the class or outsiders. Because of student involvement in the learning process, it also helps them to grasp their subject more intimately. People learn better through fun. In games and competition people participate spontaneously and it ensures wholehearted involvement of the participants. Consequently whatever they learn through games and competition they can easily internalize it and retain it for long. Aspects of contents like traits and skill which are more tacit in nature can be developed through this approach more effectively (Hytti et al. 2002). In entrepreneurship education, simulation/role play may be used frequently to reproduce the real life scenario. For example a fictitious market with pretended buyers and sellers, a mock job interview, an imaginary meeting etc. Along with entertainment, it also has its educational and motivational value (Godtfredsen, 1997; Hytti et al. 2002). Group discussion refers to dialogue among the students regarding an issue related to the lesson. It may be for case analysis, life story analysis or any relevant purpose. Such discussions facilitate interaction among the students which in turn, increase their empathy, team spirit, and communication skill (Godtfredsen, 1997; Hytti et al. 2002).

Preparation and mastering on Business plan occupy an essential place in most of the entrepreneurship development programs (North Georgia Technical Institute, 1999; Garavan and O’Cinneide, 1994b; Onstenk, 2003; EC, 2002; Le Roux and Nieuwenhuizen, 1996); Timmons et al. 1987; Brown, 2000; Roach, 1999; Noll, 1993; Jones and English, 2004). Timmons et al. (1987) suggest that the quality of the resulting business plan is a key measure of effective experiential learning. Creativity and Innovativeness are vital to entrepreneurial success (Schumpeter, 1934; Drucker, 1985). It is widely believed that creativity and innovativeness in a person can be developed through creative exercises, such as recognizing relationships among different things, using right brain hemisphere, by pursuing a systematic process of idea generation etc. (Kirby, 2004; Godtfredsen, 1997)

6.3. *Facilitation*

Facilitation refers to the characteristics of the teacher of an entrepreneurship course. Fiet (2000_b) highlights and supports the unique and critical role of the “teacher” in the pedagogy of entrepreneurship training as a facilitator to bring about attitudinal and behavioral modification in the participants for business start up. Teacher’s motivation, skill, experience and values are all important ingredients for program success. The entrepreneurship educator must have skills that may stand outside the usual mode of teaching (Godtfredsen, 1997). In fact, without the enthusiasm and active involvement of teacher/trainer it is unlikely that much progress would be achieved in this area. Considering the pivotal role of a teacher in entrepreneurship course, the Model incorporates four important features of a teacher: Education/training on entrepreneurship, Research on entrepreneurship, Business exposure and Perception about entrepreneurship as a career option.

Having sufficient knowledge about the details of entrepreneurship is highly important for teaching entrepreneurship. In this respect attending course(s) or training on entrepreneurship or wide readership of subject by the teacher is very important. A broader knowledge base will certainly put the teacher at ease and at a better position to serve the inquisitiveness of the students. Researching an area of knowledge definitely increases the horizon of knowledge and exposes the researcher to the real life situations. A researcher can relate various elements of an issue to the subject of his/her interest. Similarly, researching on entrepreneurship facilitate a teacher to grasp the subject more intimately which, in turn, smoothen the progress of better teaching (Vesper and Gartner, 1997). Entrepreneurship is an applied subject which requires the transference of the knowledge to the practical context. A teacher with exposure to the real life business world is expected to be in a position to offer more effective teaching on entrepreneurship. It is also argued that he/she can act as a role model for the students and provide useful mentoring to the students. People’s behavior is largely shaped by their perception. The perception of a teacher about the attractiveness or significance of entrepreneurship as a career option for his/her students is vital for the enthusiasm he/she can transmit among the students. A teacher who is not convinced about the prospect of entrepreneurship as a career option for his/her students can certainly not be able to stimulate the students to opt for such a career. So the strength of the perception of the teacher determines how effectively he/she can mould the interest of his/her students regarding entrepreneurship (Fiet, 2000_b).

7. **Conclusion**

Entrepreneurship education/training is not the panacea. Given the complexity of the world of an entrepreneur, no

development program can be considered comprehensive. However, there should be every effort to make the program as useful as possible to the participants. The proposed model provides a recipe with the most crucial ingredients of an entrepreneurship development program in terms of trait, skill and knowledge content as well as approaches of teaching and the essential features of the facilitators. However, the exact curriculum of any such program depends on the specificity of the situation, such as objective, duration and background of the participants. For example, the configuration of the program may vary depending on the objective(s) of the program. If the objective is to let the participants learn *about* entrepreneurship, the emphasis may be focused on knowledge component of the content and the lecture method may be sufficient to impart the knowledge. For the objective of making students more *entrepreneurial*, the stress should be more on trait and skill aspects of the contents and the whole battery of approaches are required to transmit the required traits and skills. Finally, if the objective is to prepare the participants to start an innovative business, all the components of the contents, such as traits, skills and knowledge are equally important and the faculty should also need to employ all types of approaches to facilitate proper learning to the students.

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