

Curriculum of entrepreneurship for business graduates at university level: A model for competencies based curricula

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Abstract

The chief objective of this study was to present a conceptual frame work of competencies based entrepreneurial curricula for business graduates at university level. The proposed framework is contemporary in nature and may use to construct competencies based curriculum of entrepreneurship that enables to business graduates to acquire the latest entrepreneurial education and skills in business schools to solve the real-times business challenges. This present study highlights the entrepreneurial competencies models of academic and business critically and suggested viable conceptual foundations for both fields. To solve the contemporary business challenges competencies based curricula is very important for the success and survival of organizations. This study is a unique study in entrepreneurial field and proposed an updated model. This study invites future researchers to develop a measurement scale that will help to measure the construct empirically in various organizations.

Keywords: competencies based curriculum; entrepreneurial competencies; entrepreneurship; business graduates; business schools

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1. Introduction

In contemporary business environment organizations are facing complex and vex business challenges. Organizations are facing multidimensional challenges for their success and survival. There is no doubt that to solve the complex business challenges entrepreneurial education is crucial. The term entrepreneurship refers to an individual's ability to turn ideas into action. It includes innovation, risk taking and creativity, as well as the ability to plan and manage projects to achieve organizational objectives efficiently and effectively. Minai (2018) stated that entrepreneurs are those who recognize and grasp the opportunities and then turn those opportunities into financial activities. The entrepreneurial concepts is defined as the one's mind set of promoting business activities through creativity, innovativeness and risk taking in the form of establishing new enterprise (Shamsudin, Adelaja, & Minai, 2018). In developing countries of the world, entrepreneurship works like an engine for job creation, social adjustments and job creation (Ahmed et al., 2010).

According to Chou, Shen, Hsiao, and Chen (2010) entrepreneurship education is the education that increases the students' core competency for starting a new enterprise. The objective of entrepreneurship education is to enhance student's competencies towards entrepreneurial spirit. Moreover, it enhances their attitude towards employment which is based upon the interaction of competence in taking actions, operating actions and stimulating actions (Chou et al., 2010). Research on competencies based curriculum of entrepreneurship has shown that individual who have entrepreneurial qualities are active, flexible, and view environmental changes as an opportunity for personal development. In the opinion of Shamsudin et al. (2018) entrepreneurial education should be visible to the graduates at an early stage of their carrier so that awareness of new enterprise will be the primary objective that needed to be fulfilled. On the other hand Iqbal, Melhem, and Kokash (2012) suggested that entrepreneurial education should center on generating cultural awareness and concentrated on effective knowledge transfer and competencies between graduates.

Lackeus (2013) defines entrepreneurial competencies as knowledge, skills and attitudes which affect the ability and willingness to perform entrepreneurial job. According to Bruyat and Julien (2001) entrepreneurship can be viewed as a dialogic system comprising of two entities; one is the individual (subject) and the other is the value crated (object). Both of these entities profoundly changed over the time due to surrounding environment. The competencies based curriculum of entrepreneurship should not be confused with general business education; its objective is to promote innovation, creativity and self-employment. The competencies based curriculum of entrepreneurship programs offer business graduates the tools to be an effective problem solver, think creatively, lead, communicate and analyze a business idea objectively. Business graduates feel more confident about building up new ventures. Though, the benefits of the competencies based curriculum of entrepreneurship are not limited to develop a new business and create new jobs for the society. Entrepreneurship is a competence for all, to be more creative, helping young people and self-confident in whatever they undertake.

Developed countries of the world like UK, USA, Canada and Australia are taking keen interest in promoting entrepreneurship education (EE) for reducing the gap among entrepreneurship theories and students understanding and implementation of that knowledge (Chou et al., 2010). In European Countries (EU) 15% of high school graduates have established their own companies. In United States of America (USA) a large number of enterprises have been established by business graduates between ages 14 to 25. In addition, more than 4500 high schools are providing entrepreneurial education by incorporating business graduates, teachers and administrative organizations. Moreover, the National Foundation for Teaching Entrepreneurship has promoted entrepreneurship education in 13 different countries of the world and has cultivated 150,000 graduates and helped 4200 teachers in achieving a certificate of entrepreneurship education.

In USA, entrepreneurship education has been implemented for many years, which are providing fruitful results by reducing unemployment problem, and also setting new trends towards growth and development in the country. Chou et al. (2010) stated that entrepreneurship education can reduce the gap among students learning and practice and helps in solving the unemployment problem of the society. Thus, if the competencies based curriculum for entrepreneurship used in USA can be provided efficiently and effectively for use as an indicator of growth of entrepreneurship education in Pakistan, it could help in reducing unemployment rate in Pakistan and develop entrepreneurship education.

The content of entrepreneurship curriculum regarding what, who and how to teach entrepreneurship is an ending. Edwards and Muir (2005) argued that entrepreneurial curriculum develops differently in different universities. In some universities it is taught as an optional course within business courses or an explicit course on entrepreneurship. According to Bechard and Toulouse (1998) there are four possible view-points of people: the student-entrepreneurs; the educator's viewpoints; and those who design the entrepreneurship programs in different institutions. An effective entrepreneurship education should provide opportunities for graduates to practice a combination of all the entrepreneurial leadership components. Entrepreneurship education can be seen in terms of the knowledge and skills that can be taught and characteristics that can be stimulated in graduates in order to help them develop more innovative plan (Gbettor & Harrison 2013).

2. Literature review

2.1 Entrepreneurial competencies

The term competency is used to measure the people's job performance in human resource development (HRD). According to Sanchez (2011) competencies are the cluster of knowledge, skills, traits and abilities that affect an individual's job; which correlates with one's job performance; and which can be improved through training and development. According to Johannisson (1991) there are five levels of learning; (a) knowledge, or know-what; (b) insight, or know-when; (c) social skills, or know-who; (d) skills, or know-how; (e) attitude, or know-why. On the basis of this framework he proposed appropriate approaches in entrepreneurship teaching, which involves experience and action learning through social networks.

In existing literature, different models have been proposed to measure the effect of intangible assets on the performance of entrepreneurial businesses and development of suitable curriculum to encourage business graduates to start new ventures. Byun (2018) investigated that the traditional curriculum of business education fails to meet the challenging environment. Therefore, there is a need of competencies based curriculum of entrepreneurship that develops entrepreneurial knowledge, skills and abilities in undergraduate and graduate business schools. While traditional curriculum of business education emphasizes the formation of new business ventures, the competencies based curriculum of entrepreneurship emphasizes pro-activeness, creativity, risk taking and imagination that can respond to an uncertain environment. The competencies based curriculum of entrepreneurship is a process that provides entrepreneurial knowledge, entrepreneurial behavior and viability of business activities. Furthermore, it encourages entrepreneurs and provides opportunities to start new ventures.

Entrepreneurial competencies and intellectual capital significantly improves the performance of SMEs. Khalique, Isa, Bin Shaari, and Hassan (2014) proposed a framework to study the association between entrepreneurial competencies and the organizational performance of SMEs. The study described entrepreneurial competencies as individual characteristics comprising attitudes and behaviors which help entrepreneurs to enhance performance of entrepreneurial business. This model based on five dimensions of entrepreneurial competencies namely, strategic competency, commitment competency, conceptual competency, learning competency and technical competency. The proposed model will helpful to measure the effects of entrepreneurial competencies on the performance of entrepreneurial businesses. Additionally, framework will stimulate the concept and applications of entrepreneurial competencies to the entrepreneurs and managers of

SMEs to strengthen their intangible assets. Reading the effects of intangible assets, Lackeus (2013) proposed a framework consisted of knowledge, skills and abilities for entrepreneurial competencies, which was the developed version of framework proposed by (Fisher et al., 2008), that leans on training and development framework developed by (Kraiger et al., 1993).

Table 1 shows the upgraded model of entrepreneurial competencies namely Hina and Khalique Model (HKM) previously developed by Lackeus (2013) and Lackeus and Middleton (2015) for the development of entrepreneurial curriculum: Framework outlining some key entrepreneurial competencies which are prerequisite for the development of entrepreneurial curriculum.

Table 1

Hina and Khalique Entrepreneurial Competencies Model (HKECM)

Main theme	Sub themes	Primary source	Interpretation
Knowledge & Cognitive Development	Declarative knowledge	(Kraiger et al., 1993)	Opportunities, Idea generation, risk, opportunities, accounting, finance, opportunities technology, marketing etc.
	Self-insight	(Kraiger et al., 1993)	Knowledge of being an entrepreneur or being entrepreneurial
	Mental models	(Kraiger et al., 1993)	Knowledge about how to get things done without risk and resources.
Competencies & Skills	Opportunity skills	(Fisher et al., 2008)	Recognition of business opportunities regarding Product and service.
	Marketing skills	(Fisher et al., 2008)	Accompanying market research, Dealing with customers, and assessing the marketplace.
	Strategic Skills	(Fisher et al., 2008)	Goal setting, Developing vision and mission, Defining and identifying strategy.
	Resource Skills	(Fisher et al., 2008)	Formulating business plan, developing a financial plan of overall business.
	Learning Skills Interpersonal Skills	(Fisher et al., 2008) (Fisher et al., 2008)	New learning programs, how to cope with uncertainty. Staffing, training and development, motivation, maintenance, orientation and socialization.
Behavior & Attitudes	Self-efficacy	(Fisher et al., 2008)	Belief in individual's ability to perform a specific task. "I can".
	Innovativeness	(Mumieks, 2007)	Applying new and visionary ideas. "I create".
	Entrepreneurial Passion	(Fisher et al., 2008)	Norms, values and beliefs. "I am".
	Uncertainty Entrepreneurial Identity	(Sánchez, 2011) (Krueger, 2007)	Comfortably deals with ambiguity and uncertainty. "I dare". Norms, values and beliefs. "I am".
	Perseverance	(Markman et al., 2005)	Mental ability to deal with complex situations. "I overcome".
	Reactiveness	(Sánchez, 2011)	Proactive, initiator and action-oriented. "I do".

2.2 Entrepreneurship curriculum

Kee, Rodrigues, Kundu, and Racine (2006) identified a curriculum of entrepreneurship for developing economies that identifies four critical challenges (a) identification of the target group, (b) defining and measuring entrepreneurship or identifying entrepreneurial traits, (c) deciding on a particular pedagogy and (d) content of the curriculum.

Identification of the target group - According to Fillion (1998) the ideal age to get basic knowledge regarding entrepreneurship is during childhood and adolescent years. Fillion (1998) stated that entrepreneurial potential can be recognized at secondary school level, during the development stage of student when the career possibility of self-employment is open. Though the previous studies showed that university based entrepreneurship curriculum has been fascinated the majority of studies within the area of entrepreneurship education (Kee et al. 2006). According to Donckels (1991); Kourilsky (1995) entrepreneurship development in primary and secondary schools is gaining more attention because the students of this age group are motivated to participate in entrepreneurship education programs. Kee et al. (2006) surveyed the status of entrepreneurial education in various countries of the world. The result indicates that entrepreneurship education occurs mostly in the secondary school level or at the graduate level through business management courses. Though, the existing

curricula encourage students to take responsibility and initiative in many developed countries. The most important players in the discipline of entrepreneurship education are non-profit organizations (NGO's) supported by the private sector.

In Norway, the Government is implementing the Strategy for Entrepreneurship Education by partnering with Young Enterprise Norway (YEN). In 2004, approximately 14 percent of all students leaving secondary school had participated in the Student Company Program. In United States of America (USA) a number of entrepreneurship education programs have been started in past decade. National Foundation for Teaching Entrepreneurship (NFTE) as well as several other well-known actors both a nation-wide presence as well as collaborations with other organization in many other countries. Moreover, the Consortium for Entrepreneurship Education (CEE), has developed content standards for entrepreneurship education in schools. In Netherland, the government provides support in the form of training of teachers by development of teaching materials in order to enhance entrepreneurship education in secondary schools. In developing countries, entrepreneurship education is provided through technical and vocational training (TVET) but the learning outcome is to teach graduates on how to start and run an enterprise has a very limited scope. Furthermore, entrepreneurship education is either limited to university level education or to vocational training institutes.

Identification of entrepreneurial traits - In 18th century, a French textile manufacturer and economist Jean-Baptiste Say, wrote that the human contribution towards economic growth and development came in three different ways; scientists, workers and entrepreneurs (Kee et al. 2006). Though, the rise of a definitive economic theory connecting entrepreneurship and economic development came into existence to the early work of Schumpeter. According to him the entrepreneur are playing a very vital role in the economic world. Moreover, improved processes of production and value added products were developed by the entrepreneurs and hence contributing their role in economic growth. Kee et al. (2006) investigated that the role of entrepreneurship in economic growth can be explained through the role played by the entrepreneurs.

It is argued that entrepreneurship covers at least three dimensions: risk and uncertainty, the perception of opportunity recognition or profit opportunities, and innovation and change (Kee et al. 2006). Kee et al. (2006) stated that these three traits should have been included in the definition of entrepreneurship: "uncertainty and risk," managerial competence," and "creativity and innovation." Though previous studies has debated whether entrepreneurial characteristics are innate, current research findings support the idea that psychological attributes linked with entrepreneurship can be culturally and experientially acquired. Individuals are predisposed to entrepreneurial intentions based on a combination of personal and contextual factors (Gorman, 1997). Personal factors such as prior experience as an entrepreneur have limited applicability to entrepreneurial propensity in young people. On the other hand, psychological attributes, have produced the most support for calculating whether an individual will pursue entrepreneurship.

Deciding on a particular pedagogy - Previous research studies indicate a strong correlation among education and entrepreneurship. Conversely, it has been contended that formal education does not encourage entrepreneurship. According to Filion (1998) formal education prepares students only for the corporate domain, which suppresses innovation, creativity and entrepreneurship that promote a mentality of 'take-a job'. Hence, it has been recommended that school systems need to reoriented their pedagogy and contents to nurture entrepreneurship. In order to promote entrepreneurship, a number of specialized courses should have been offered in institutions and the concept of enterprise education program is used to foster the scope of entrepreneurship. It is also recommended that not only does the content and pedagogy needs to be changed but the entire school culture needs to be developed that encourage learning, thinking, and teamwork as well building enterprising teachers (Kee et al. 2006). Therefore, Entrepreneurial education needs to emphasis on self-employment, as well as entrepreneurial knowledge, skills and attributes that cannot be nurtured through traditional teaching methods.

Content of the curriculum - Kee et al. (2006) suggested that the course of entrepreneurship should be

designed like a workshop whose aim should be for graduates to build their own products and then market and sell those products and services. The ultimate benefit of this approach is that the pedagogy and curriculum so designed that it can also be used in non-formal education institutions. Though, while designing curriculum and lesson plans it should be keeping in mind that it can be easily understandable so that it can be mainstreamed into most institutions. The final output has two main components:

- **Teacher Guide:** The teacher's guide covers detailed lesson plans and is for using as a tool by teachers to communicate entrepreneurship education in institutions.
- **Student work-book:** The teacher guide is supplemented by a student work book which will assist learning for the students. This work book also contains the detail activities that graduates are expected to take part during course of entrepreneurship.

3. Developing entrepreneurial competencies in business graduates

The purpose of entrepreneurial education is to develop entrepreneurial competencies in business graduates through various initiatives that emphasis of knowledge, skills and abilities (KSA). Many scholars apply a narrow definition of entrepreneurship which focused primarily on self-employment, opportunity, venture creation, growth and business development (Mahieu, 2006, Fayolle & Gailly, 2008). A few numbers of scholars apply a broader definition by focusing on self-reliance, personal development, creativity, action orientation and initiative taking (Mwasalwiba, 2010). However, a large number of scholars state that there is only one way to become an entrepreneur, and that is by learning through own experience. Cope (2005) investigated that there is no short cut to become an entrepreneur; it can only be achieved through action-based approaches that is learning-by-doing.

4. Conclusion and recommendations

In contemporary business environment the professional business education is crucial for the success and sustainability of organizations to get a competitive edge. Lack of professional business education and academic entrepreneurship the performance of organization is destitute and petrified. This study offered seminal work and after systematic literature review proposed Entrepreneurial competencies model (Khalique et al, 2014) for business perspective and entrepreneurial competencies (Lackeus, 2015) for entrepreneurial course curriculum development are providing a clear guideline for constructing fascinating business curriculum for Pakistani business graduates.

4.1 Future recommendations

Presently, this study offered a strong conceptual foundation to construct competencies based curriculum of entrepreneurship that will help to business graduates to be a successful entrepreneurs in a competitive business environment. This study demanded to develop a measurement scale that will help to measure empirically. Secondly, this study offers various research avenues in academia and research industry to apply and measure the aforementioned constructs in different prism.

5. References

- Ahmed, I., Nawaz, M. M., Ahmad, Z., Shaukat, M. Z., Usman, A., Rehman, W. U., & Ahmed, N. (2010). Determinants of students' entrepreneurial career intentions: Evidence from business graduates. *European Journal of Social Sciences*, 15(2), 14-22.
- Azila-Gbettor, E. M., & Harrison, A. P. (2013). Entrepreneurship training and capacity building of Ghanaian polytechnic graduates. *International Review of Management and Marketing*, 3(3), 102-111.
- Béchar, J. P., & Grégoire, D. (2005). Entrepreneurship education research revisited: The case of higher education. *Academy of Management Learning & Education*, 4(1), 22-43.
<https://doi.org/10.5465/amle.2005.16132536>

- Bruyat, C., & Julien, P. A. (2001). Defining the field of research in entrepreneurship. *Journal of Business Venturing*, 16(2), 165-180. [https://doi.org/10.1016/S0883-9026\(99\)00043-9](https://doi.org/10.1016/S0883-9026(99)00043-9)
- Byun, C. G., Sung, C., Park, J., & Choi, D. (2018). A study on the effectiveness of entrepreneurship education programs in higher education institutions: A case study of Korean graduate programs. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(3), 26. <https://doi.org/10.3390/joitmc4030026>
- Chou, C. M., Shen, C. H., Hsiao, H. C., & Chen, S. C. (2010). A study on constructing entrepreneurial competence indicators for business department students of vocational and technical colleges in Taiwan. *World Transactions on Engineering and Technology Education*, 8(3), 316-320.
- Donckels, R. (1991). Education and entrepreneurship experiences from secondary and university education in Belgium. *Journal of Small Business & Entrepreneurship*, 9(1), 35-42. <https://doi.org/10.1080/08276331.1991.10600389>
- Edwards, L. J., & Muir, E. J. (2005). Promoting entrepreneurship at the University of Glamorgan through formal and informal learning. *Journal of Small Business and Enterprise Development*, 12(4), 613-626. <https://doi.org/10.1108/14626000510628261>
- Fayolle, A., & Gailly, B. (2008). From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7), 569-593. <https://doi.org/10.1108/03090590810899838>
- Filion, L. J. (1998). From entrepreneurship to enterpenology: The emergence of a new discipline. *Journal of Enterprising Culture*, 6(1), 1-23. <https://doi.org/10.1142/S0218495898000023>
- Fisher, B., Turner, K., Zylstra, M., et al. (2008). Ecosystem services and economic theory: Integration for policy relevant research. *Ecological Applications*, 18, 2050-2067. <https://doi.org/10.1890/07-1537.1>
- Gorman, G., Hanlon, D., & King, W. (1997). Some research perspectives on entrepreneurship education, enterprise education and education for small business management: A ten-year literature review. *International Small Business Journal*, 15(3), 56-77. <https://doi.org/10.1177/0266242697153004>
- Hashim, N. A. B., Raza, S., & Minai, M. S. (2018). Relationship between entrepreneurial competencies and small firm performance: are dynamic capabilities the missing link? *Academy of Strategic Management Journal*, 17(2).
- Iqbal, A., Melhem, Y., & Kokash, H. (2012). Readiness of the university students towards entrepreneurship in Saudi private university: An exploratory study. *European Scientific Journal*, 8(15).
- Johannisson, B. (1991). University training for entrepreneurship: Swedish approaches. *Entrepreneurship & Regional Development*, 3(1), 67-82. <https://doi.org/10.1080/08985629100000005>
- Kee, J., Rodrigues, P., Kundu, S., & Racine, J. L. (2006). *Entrepreneurship curriculum: Project report for Jip grant*. Retrieved from https://www.sylff.org/pdf/fellows/JIP2006_23.pdf
- Khalique, M., Isa, A. H. M., Bin Shaari, J. A. N., & Hassan, M. K. H. (2014). *Constructing an index of entrepreneurial competencies and intellectual capital for ICT SMEs in Malaysia*. Paper presented in the 2014 6th International Borneo Business Conference.
- Kourilsky, M. L. (1995). *Entrepreneurship education: Opportunity in search of curriculum*. Retrieved from http://www.unm.edu/~asalazar/Kauffman/Entrep_research/e_educ.pdf
- Kraiger, K., Ford, J. K., & Salas, E. (1993). Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training evaluation. *Journal of Applied Psychology*, 78, 311-328. <https://doi.org/10.1037/0021-9010.78.2.311>
- Lackeus, M. (2013). *Developing entrepreneurial competencies. An action-based approach and classification in education*. Gothenburg: Chalmers University of Technology.
- Lackeus, M., & Middleton, K. W. (2015). Venture creation programs: Bridging entrepreneurship education and technology transfer. *Education + Training*, 57(1), 48-73. <https://doi.org/10.1108/ET-02-2013-0013>
- Mahieu, R. (2006). *Agents of change and policies of scale: a policy study of entrepreneurship and enterprise in education*. Umeå, Sweden: Umeå University.
- Markman, G. D., Baron, R. A., & Balkin, D. B. (2005). Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking. *Journal of Organizational Behavior*, 26(1), 1-19. <https://doi.org/10.1002/job.305>
-

- Murnieks, C. Y., Mosakowski, E. M. (2006). *Entrepreneurial passion: An identity theory perspective*. Paper presented at the annual meeting of the Academy of Management, Atlanta, GA.
- Mwasalwiba, S. E. (2010). Entrepreneurship education: a review of its objectives, teaching methods, and impact indicators. *Education + Training*, 52(1), 20-47. <https://doi.org/10.1108/00400911011017663>
- Pittaway, L., & Cope, J. (2007). Simulating entrepreneurial learning: Integrating experiential and collaborative approaches to learning. *Management Learning*, 38(2), 211-233. <https://doi.org/10.1177/1350507607075776>
- Sánchez, J. C. (2011). Entrepreneurship: introduction. *Psicothema*, 23(3), 424-426.
- Shamsudin, A. S., Adelaja, A. A., & Minai, M. S. (2018). Conceptualizing the effect of entrepreneurial education and industrial interface mix in enhancing the entrepreneurial intention amongst graduates. *Journal of Entrepreneurship Education*, 21(3), 1-9.