Entrepreneurship Education in Higher Education of Selected Countries

Hamid Rahimi1 (Corresponding author)

Due to the vital role of entrepreneurship, many efforts have been made to improve and promote it, the most important of which is the provision of entrepreneurship education programs in universities and educational institutions in different countries of the world. By studying the experiences of other countries, a proposed model for entrepreneurship education in Iran can be reached. The purpose of this research was to study of entrepreneurship education in higher education in selected countries comparatively. The research questions edited to considering types entrepreneurship education in terms of location, structure and trainers of entrepreneurship education. The method of the present study was a qualitative adaptation based on the use of a four-stage Bereday's approach. The statistical population included different countries of the world and statistical sample consisted of several countries such as United States, Germany, Netherland, Philippine & Australia that were selected through purposive sampling. The method of data collection was documented and the validity of documents was assessed through internal evaluation (content accuracy) and external evaluation (document accuracy). Qualitative content analysis method was used to analyze the data. The findings showed that entrepreneurship education in all five countries studied is done more in the educational environment than in the workplace. In terms of types of educators (field specialists, entrepreneurship specialists and in combination), the highest similarity was between the United States, Philippine and Germany, and the Netherland and Australia were different from the other three countries. In terms of structure (single course, course and certification), the similarities were more in the form of single course and course. According to the findings, the appropriate model of entrepreneurship education in higher education in Iran can be used as a model for compiling courses (in the form of discipline, orientation, interdisciplinary and integrated) in all educational fields (Humanities, Engineering, Basic Sciences, Art and Medicine) or be formulated as an entrepreneurial university.

1 Associate Professor, Department of Educational Sciences, Faculty of Literature and Humanities, University of Kashan, Iran, Email: dr.hamid.rahimi@kashanu.ac.ir
1. Introduction

Due to the vital role of entrepreneurship, many efforts have been made to improve and promote it, the most important of which is to provide entrepreneurship education programs in universities and educational institutions in different countries. Entrepreneurship education can be one of the most effective ways to facilitate the transfer of graduate population to the labor market. Studies in Europe have shown that such training has been able to make people more responsible and turn them into entrepreneurs or entrepreneurial thinkers. Thus, the unemployment rate and the failure of the business have been reduced (Urbano, Aponte & Toledano, 2008). Also studies in the United States, Europe, and Southeast Asia show that entrepreneurship education, if combined with other incentives and facilitators, will be very effective (Carree & Thurik, 2010, Mason, 2011). Rasmussen and Sorheim (2006) believe that people who participate in entrepreneurship training courses start more businesses than those who participate in other job courses.

Many experts believe that one of the main factors determining the level of entrepreneurship in any country is how it is taught (Valerio, Parton & Robb, 2014). Entrepreneurship planning methods in the educational system are in two approaches: The first approach, i.e. entrepreneurship education is based on the assumption that entrepreneurship is like a set of behavioral elements in the dimensions of knowledge, insight and skills that can be created through education in individuals. From this perspective, entrepreneurship is teachable. Efforts to launch courses with the title and subject of entrepreneurship or to combine courses related to business and entrepreneurship in the educational programs of different university centers can be evaluated in this regard. Another conceptual approach is entrepreneurial education, which involves improving the overall education system in order to facilitate the conditions for entrepreneurial learning and nurturing entrepreneurial graduates in various fields of study. The first approach seeks to integrate entrepreneurship as a discipline, a trend or a curriculum in the education system. While the second approach have systematic nature and seeks to change the whole educational system and its elements (Saljoghi, 2013).

The history of entrepreneurship education in higher education in developing countries dates back to the early 1990s. From this decade, various reasons such as rising unemployment, observing the impact of entrepreneurship programs and its training on the economic growth of developed countries, caused this issue to receive more attention. Entrepreneurship training programs are conducted in developing countries so that people can create self-employment and manage their jobs (Bauer, 2011). These programs tend to combine training with other processes such as microfinance, grants, internships or coaching (McKenzie & Woodruff, 2013). Germany, United
States, Japan and United Kingdom were the first countries to take action in the field of entrepreneurship education. While entrepreneurship education in the American educational system is defined as focusing on starting a company or self-employment (Lackeus, 2015); In Sweden, the term is often used equivalent to business skills training (Leffler & Falk-Lundqvist, 2013), and in Finland it is synonymous with internal and external business training. Internal entrepreneurship focuses more on basic education, but external entrepreneurship goes beyond the goals of basic education and focuses more on strengthening individual and social skills, risk-taking, creativity, independence and need for achievement (Seikkula-Leino, Ruskovaara, Ikavalko, Mattila & Rytikola, 2010). But the beginning of entrepreneurship education in Iran can be considered as holding training workshops held by Indian teachers. Short informal courses were held for the country's managers in northern Iran. After these cross-cutting activities, the country's education evaluation organization, after many expert reviews, approved the Karad plan (entrepreneurship in universities). This plan was prepared in order to develop and promote the level of entrepreneurship, especially the educational aspects of students and graduates of different educational levels and to provide more participation of academics in the development of the country, and was notified to universities and higher education institutions for implementation (Tayrani, 2011).

Various studies have been conducted around effects and consequences of entrepreneurship education in world. For example, Smith, Hamilton, and Khristin (2019) surveyed the motivations, barriers, and empowerment of entrepreneurship among Australian students and found that lack of self-confidence, leadership skills, difficulty of finding right ideas, fear of failure and worry, and limit experience have been the most important barriers to entrepreneurship for Australian University students. Take & Shoraku (2018) in their research evaluated the organizational actions of Japanese and British universities engaged in entrepreneurial activities. Their findings show that high-level organizational strategies (supervision, management, leadership and capitalism) have led to the creation of an entrepreneurial university. Katundu & Gabagambi (2016) assessed barriers to business among graduates in University of Tanzania. Obstacles identified by the research findings include inadequate teaching methods, lack of business experience, shortcomings in university curricula appropriate to the labor market, lack of family support, tend to government jobs, and bureaucratic programs. The solutions offered to overcome these barriers include modifying curricula and adapting them to the needs of labor market, as well as adopting an internship approach to transfer business skills to students.

Johansen & Schanke (2013) in a study showed that entrepreneurship education in Norwegian secondary schools is done using a distinction between three educational methods including entrepreneurship education, education for entrepreneurship and education through
entrepreneurship. Also their findings show that about 90 percent of schools offer these trainings tailored to geographical areas along with local projects. A survey conducted by Solomon & May (2014 as cited in Barnard, & Pittz, 2018) among 279 students at American Universities and Colleges to find out what entrepreneurship-related courses are offered, shows that 53% of people have chosen entrepreneurship courses, 36% small business management and 30% to start of new business. In research of Matlay (2003) entitled entrepreneurship education in China, ten models in the form of (Economic & social theories, economic in management, organizational behavior, financial management, financial marketing, information systems, information technologies, accounting, financial analysis and financial risk management) is offered in business schools. Postigo & Tamborini (2002) in assessing the current state of student entrepreneurship education in Argentina suggested that students receive courses in order of priority for entrepreneurship education, including: introduction to entrepreneurship and business, creativity and innovation, social entrepreneurship, finance and investment affairs, business plan development and management of job units.

In developing countries such as Iran, according to unofficial statistics, the unemployment rate averages 12 percent. Addressing the issue of entrepreneurship can reduce the unemployment rate and consequently reduce social harms. At present, Iranian higher education is facing problems and harms, including unemployment, elite flight, documentarians, low quality of university education, dissatisfaction of faculty members in educational, research, administrative and welfare matters (Fathi Vajargah & Maleki, 2012). In addition, according to the report of Statistics Center of Iran in 2016, about 40% of the unemployed in the country are university graduates. While the government has the capacity to employ a limited number of university graduates (Ahmadkhani, Ghalavandi & Mohajeran, 2019). In this situation, by investing in education and especially entrepreneurship education, we can help the development of society and individuals. On the other hand, the situation shows that the current situation of entrepreneurship education, especially at the level of higher education in Iran, does not have a coherent pattern and is scattered and confused (Shojaei, Arefi, Fathi Vajargah & Shams Morakani, 2019).

One way to organize the entrepreneurship education model is to use global experiences and studies at the international level. Since few studies have been conducted on the comparative study of entrepreneurship education in higher education in Iran, this study has tried to identify, extract and comparison the most important areas of implementation of entrepreneurship education in the higher education system of five countries: USA, Australia, Germany, Netherlands and Philippines to identify the most important points of difference and similarity. Therefore, by examining the experiences of several selected countries, the purpose of this study is to answer the following three questions:
1. What are the similarities and differences between entrepreneurship educations in terms of location (work environment or educational environment) in selected countries?

2. What are the similarities and differences between types of entrepreneurship education in terms of structure (single course, course or official university degree award) in selected countries?

3. What are the similarities and differences between different types of entrepreneurship educators (people specializing in one field or entrepreneurship education specialists or in combination) in selected countries?

2. Research Method

Considering the purpose of research, the method used is qualitatively comparative using Bereday's approach. The statistical population includes all countries of the world from which the four countries of the United States, Germany, the Netherlands, the Philippines and Australia were selected using purposive sampling. Two important factors have played a role in selecting these countries: one is the successful experience of these countries and the other is the credible studies and researches of these countries in the field of entrepreneurship education. In this study, data’s were collected through the study of library documents, research reports and searches on the World Wide Web such as UNESCO, Dissertation, and higher education sites of the countries under study, and finally in the form of checklists and Tables were summarized. External and internal critiques were used to assess the validity of the obtained records. The internal evaluation was concerned with the importance and accuracy of the content while the external evaluation mainly took into account the importance and accuracy of the document itself. In order to increase the credibility of documents in this research, it was tried to use more valid sites and magazines. The qualitative method of thematic content analysis was used to analyze the data’s and the Brody approach was used to present the results.

3. Findings

This section includes information on the steps of description, interpretation, juxtaposition, and comparison using Bereday’s four-step approach. In the first stage, the characteristics of entrepreneurship education in selected countries are described. In this section, the characteristics of types of entrepreneurship education, structure and type of educators in all five countries are explained. Then, during the two stages of interpretation and juxtaposition, the five countries are compared in terms of the elements under study, and finally, in the stage of comparison, the similarities and differences are examined in terms of elements.
A) Description

According to Bereday’s approach, description involves taking notes and providing enough information to examine the subject of research. Accordingly, by examining the documents related to entrepreneurship education, the characteristics related to the three elements of the characteristics of types of educators, the structure and types of entrepreneurship education, are collected and presented separately:

1. Description of entrepreneurship education in terms of educational environments

Australia: The Center for Technical & Vocational Training is the largest trainer in management and entrepreneurship courses. The government’s goal is to create a network of entrepreneurial centers in universities. These entrepreneurship centers are supported by government investments, especially in the field of teaching and business activities. The Ministry of Technical & Vocational Education operates on the following categories:

- Awarding the certificate of competency to the trainees and consultants of small companies
- Establishing face-to-face meetings and providing financial assistance
- Use of advanced training aids for training and use of information technologies for information exchange at the organizational and extra-organizational level (Dutta, 2005).

Germany: Until 2000, the state of education in Germany was relatively unfavorable. The activities taken by the government to improve the situation have been somewhat effective. The introduction of entrepreneurship courses at universities since 2000 has led to improve the situation in Germany. Also the government, in cooperation with the German Balance Bank, has set up university chairs to create businesses. The purpose of this work is public access to fields of entrepreneurship and familiarizing students and nurturing them as entrepreneurs and starting self-employment in their lives. A total, 42 universities and school of high technical have focused their activities on entrepreneurship (Hytti, 2004).

Netherlands: At the Universities of Business and Management, students are taught entrepreneurship in the fields of education, research and consulting. Government of the Netherlands to expand support and awareness in structure of education, to present plans for the development and implementation of basic activities for the growth of knowledge and technical skills and to present plans to remove entrepreneurial barriers and encourage students to move towards starting a business, an Advisory Committee on Education & Entrepreneurship has formed (United International Business Schools, 2018). Today there are more than 50 courses such as
accounting, banking, management, business, communications, psychology, culture, human resources, economics, tourism, etc. in various universities in the Netherlands. Many programs offer a combination of knowledge and practical work, and encouraging students to get started. Students as start-up entrepreneurs, the ultimate goal of these trainings to view for identifying entrepreneurial opportunities and create a private company with students in other fields. These programs prepare about 700 start-up entrepreneur students each year and create over 120 startup projects. Students who wish to specialize in entrepreneurship after their bachelor's degree can start a master's degree in entrepreneurship or pursue one of the specialized paths (business management, entrepreneurship and innovation, business and entrepreneurship management, and creative industry management) (Amsterdam Business School, 2020).

Philippines: 21 state-owned enterprises have implemented training and information services programs for small and medium-sized enterprises. The Ministry of Commerce and Industry, in order to promote entrepreneurship and growth of small industries, has entrusted matters related to this field to the Center of Development of Small and Large Trade (Wood, 2010). In the late 1970s, the National University established the Institute of Small Industries under the management of School of Business Administration, whose primary responsibility was to conduct research, education, and industrial development services. In the following years, other universities steps by followed of Philippine National University to teach entrepreneurship. The universities effort led to this conclusion that the institutions in implementing their programs used not only the resources of business faculties but also the resources of engineering faculties, law and other vocational faculties.

United States: In the early 1980s, about 300 schools had entrepreneurship programs and small businesses. By the 1990s, that number had grown to 1,050 schools and colleges, that marking the beginning of a rapid expansion of entrepreneurship education. In the early 2000s, entrepreneurship education was offered in more than 1,600 schools and colleges, and more than 2,200 courses, including journals and business publications, were devoted to entrepreneurship (DoBell & Ingle, 2009). Today, entrepreneurship education is provided in more than 5,000 schools and colleges through about 5,500 courses (Schramm, 2019). Also scholarships are provided to applicants by colleges through communication or sharing experiences or shared activities (Barnard & Pittz, 2018).

2. Description of entrepreneurship education in terms of structure

Australia: In addition to formal and classical training for industry managers, a seminar will be held. The Australian Government in 1988 convened a meeting of 110 small business delegations to discuss about reform of tax structure, bureaucracy and administrative barriers, tourism,
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...development of small business managers’ skills, and government policies about entrepreneurship and regional issues. In addition, there are approximately 135 entrepreneurship training centers across Australia, focusing primarily on activities dedicated to entrepreneurship, business, development and growth, innovation, creativity and entrepreneurship networks. Also examples of entrepreneurship topics are offered at Australian universities such as Entrepreneurship theory and practice, introduction to entrepreneurship, foundations for starting and creating new investments, strategic entrepreneurship and entrepreneurship finance affairs (Maritz & Jones, 2015). In addition topics related to entrepreneurship found in universities include: design thinking, creative thinking, new product development, innovation management, engineering innovation, investment strategies, negotiation skills and strategies.

Germany: Entrepreneurship courses include entrepreneurship, management and start-up issues, start-up family companies, forms of investing in innovation, innovation management, acquiring information technology in start-up company, venture capital, conflicts in start-up company and dispute resolution, company cycles, company development, improving the company's economic situation, investment participation, risk-taking, company start-up time, group decision-making process analysis, exchange of ideas and expressing students’ statements about the company start-up process (Hytti, 2004). At the Free University of Berlin, the independent field of entrepreneurship has not yet been established, but in economics, courses such as entrepreneurship and innovation management are offered. At the Technical University of Dresden, in the framework of management science, courses, classes and exercises on the principles of company establishment, management science of young companies, innovation management and technology of Start-up Company are offered. For students of other fields, optional units of entrepreneurship are considered which is about technology of start-up principles in innovation planning. At the School of Management at the University of Mannheim, the field of entrepreneurship is designed in three areas: education, research and teamwork. Training materials in training phase include new ideas, market forecasting, market entry strategy, investment issues, market success indicators, psychological issues, organizing and planning of company (Ibid).

Philippines: At levels of university and high school, there are activities to promote entrepreneurship and small industries. The formal education system focused more on graduates seeking employment than on creating employment on their own. This approach, on the one hand, led to the growth of large industries that were more capital-intensive than labor-intensive, and on the other hand, increased the immigration ratio. Therefore, the efforts of universities to promote entrepreneurship and growth of small industries can, firstly, provide employment opportunities in the country and, secondly, reduce the rate of migration to large cities. Also various schools in the Philippines teach entrepreneurship. These schools have different courses that teach basic
knowledge and skills to aspiring entrepreneurs. These courses include reading and writing English and Philippine, environmental sciences, general psychology, computer science, basic statistics, basic business math, human behavior, management principles, marketing principles, accounting principles, business communication, human resource management, sales management, business consulting, research and development and management information systems (Espiritu & Pura, 2015). Also the business schools in field of business management 24 course offer in undergraduate level, which is related to risk management and entrepreneurship and management of small business & industrial units. The method of "motivation to achieve the goal" was used to cultivate, improve and develop human resources. This method prepares the ground for small units and application of risk-taking management and entrepreneurial style. The government also offers training courses for consultants and workers in small enterprises.

United States: For the first time in 1986, the Harvard Business School developed curricula and entrepreneurship training courses. Entrepreneurship training programs began at University of Southern California in 1971 and at Carnegie-Mellon University in 1972. About 55% of entrepreneurship training programs were jointly at undergraduate and graduate levels, the other 30% were for graduate courses only, and the remaining 15% were for undergraduate courses. Harvard Business School is the only university in world that guides entrepreneurial thinking and development, and offers many entrepreneurial concepts to other universities and students by defining topics, lessons, and courses. According to studies conducted in the United States, 126 colleges have divided their curricula in to three entrepreneurship areas: start-up of business, small business management and small & large business management (Wood, 2010). The schedule of entrepreneurship education classes in some universities is separate from official university classes, and all undergraduate students are required to choose a maximum of 2 courses during the first and second years of their studies optionally. Universities, according to entrepreneurship characteristics and skills, empower students to do business and present more appropriate and better ideas and techniques in this field, and in this regard, universities and various institutions for entrepreneurship education work closely together (Hisrich & Peters 2002). Entrepreneurship is basically offered as an optional course, but in Europe there is a tendency to offer it compulsorily in all disciplines. Entrepreneurship training is available at every undergraduate and graduate level, but no action has yet been taken in the doctoral program (Dutta, 2005).

3. Description of types of trainers

One of the most important issues in entrepreneurship education, especially in European universities, is the lack of professorship, and for this reason, Europe has lagged behind the United States in entrepreneurship education. In addition, entrepreneurship education is currently offered
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...to students of business and economics, and access to entrepreneurship education for other students in various disciplines is almost limited (Franzoni & Lissoni, 2006). The professors at Roxi Institute in Germany were out-of-university people with experience in business and management. In the Netherland, industry professionals were hired to train and coach new and emerging entrepreneurs, and people with different business backgrounds were invited to university to teach new pedagogical activities (such as coaching) and introduced places to professors and students that entrepreneurship and business were possible. At Babson University, programs are designed to view as a tool for raising educational standards. In these programs, by inviting experienced professors in the field of entrepreneurship, less experienced faculty members are registered to participate in this course, which of course is done with the coordination of other faculty members. New faculty members will welcome these courses, especially if they have an impact on their promotion (Zali, 2006).

B) Interpretation and Juxtaposition

According to Table 1, entrepreneurship education in selected countries in terms of location, was more in schools and universities. In terms of structure, was as single course, training course and awarding a formal university degree. In terms of entrepreneurship education educators, educators can be an expert in a field or entrepreneurship education specialists or in combination.

### Table 1. Juxtaposition of entrepreneurship education model in different countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Training Location</th>
<th>Training Structure</th>
<th>Type of Trainers</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A</td>
<td>School &amp; Colleges</td>
<td>Single lesson, course</td>
<td>Experts in a field, Entrepreneurship education specialists</td>
</tr>
<tr>
<td>Germany</td>
<td>University, Higher Technical School and Internal Institutes Higher Technical Schools</td>
<td>Single lesson, course, Field of Study</td>
<td>Experts in a field, Entrepreneurship education specialist</td>
</tr>
<tr>
<td>Netherland</td>
<td>Universities of Business and Management</td>
<td>Course-Awarding a University Degree</td>
<td>Experts in a field</td>
</tr>
<tr>
<td>Philippines</td>
<td>School &amp; University</td>
<td>Single lesson, course</td>
<td>Experts in a field, Entrepreneurship education specialist</td>
</tr>
<tr>
<td>Australia</td>
<td>Technical and Vocational Training Center</td>
<td>Holding courses related to entrepreneurship</td>
<td>Entrepreneurship education specialist</td>
</tr>
</tbody>
</table>

According to Table 1, entrepreneurship education in selected countries in terms of location, was more in schools and universities. In terms of structure, was as single course, training course and awarding a formal university degree. In terms of entrepreneurship education educators, educators can be an expert in a field or entrepreneurship education specialists or in combination.
C) Comparison

During this stage, the information and elements examined in the previous stage is classified and grouped in terms of similarities and differences.

Similarities and differences in terms of:

- Types of entrepreneurship training in terms of location (work environment or educational environments)
- Types of entrepreneurship education in terms of structure (single course, course or award of a formal university degree)
- Types of educators (expert people in a field or entrepreneurship education specialists or in combination)

Table 2. Combining the characteristics of entrepreneurship education in selected countries

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Indicator</th>
<th>Australia</th>
<th>U.S.A</th>
<th>Philippines</th>
<th>Netherland</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of entrepreneurship training</td>
<td>Educational environments</td>
<td>*</td>
<td>=</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Entrepreneurship education in terms of</td>
<td>Single course</td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>structure</td>
<td>Course</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Formal university degree</td>
<td>*</td>
<td>-</td>
<td>-</td>
<td>*</td>
<td>-</td>
</tr>
<tr>
<td>Types of educators</td>
<td>Experts in a field</td>
<td>-</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurship education specialist</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Combination</td>
<td>-</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>
**Table 3. Similarities and differences of selected countries in each of the elements**

<table>
<thead>
<tr>
<th>Components</th>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of entrepreneurship training</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Entrepreneurship education in terms of structure</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Types of educators</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

According to Tables 2 and 3, there is a similarity between entrepreneurship education in all five countries in terms of the location of entrepreneurship education (work environment and educational environment) and entrepreneurship education is done more in the educational environment than work environment. In terms of structure (single course, course and degree award), the similarities were more in the form of single course and course. Entrepreneurship education in the United States is a course and single course as well as a field. In Australia, entrepreneurship education is mostly in the form of formal and classical training and certification of trainees, in the Netherlands in the form of courses and certification of trainees and in Germany and the Philippines, entrepreneurship education is in the form of single courses and courses. In terms of types of educators (field specialists, entrepreneurship specialists and in combination), the most similarity was between the United States, Philippines and Germany, and the Netherlands and Australia were different from the other three countries. In the United States, Germany, and Philippines, entrepreneurship education was done by both experts in a field and entrepreneurship education specialist. In Australia, educators were entrepreneurial educators, and in Netherlands, educators were industry professionals.

**4. Conclusion**

In the field of educators, in the United States, Germany and Philippine, entrepreneurship education was provided by both experts in field and entrepreneurship education specialists. In Australia, educators were entrepreneurship education specialists. In the Netherlands, educators were industry professionals. Maybe there is no way that can be introduced as the best method. Also extensive studies show that the use of a particular method in entrepreneurship education cannot guarantee our achievement. It is also not possible to provide an entrepreneurial training method that can be used for all situations. Therefore, in most countries, both entrepreneurship education specialists and specialists in a specific field were used alternately. Entrepreneurship education can be taught to people through the process of problem-solving, search for new and pure solutions,
awareness of opportunities and threats in the field of business, exploration, extracurricular activities, specialized courses, internships, through the experiences of entrepreneurs, combination of theoretical and practical training, conversion process people ideas to practical plans, extracting pure business ideas from training and research, and processing appropriate business ideas, through individual training, through internships in business environments, defining and carrying out individual projects, action research, case studies, communicating with entrepreneurs and entrepreneurial organizations, facing threats and crises, through information and communication technology, transforming ideas into action plans, discussing important and pure action plans, skills in analyzing opportunities, mastering on methods of research and of scientific, educational and research development, etc.

According to findings of the previous three questions, the appropriate model of entrepreneurship education in higher education in Iran can be used as a lesson model (in the form of discipline, orientation, interdisciplinary and incorporated) in all educational fields (humanities, engineering, basic sciences, art and medicine) or be formulated as an entrepreneurial university. Entrepreneurial University can be organized in five fields of humanities, basic, technical & engineering, art and medicine as a discipline, orientation, interdisciplinary and incorporated. Also presented as a one-lesson model in different levels of bachelor (general, main, specialized and optional), master (main, specialized and optional) and doctoral (main, specialized and optional) in form of theoretical and practical.

In addition, in organizational structure component, current structure of the Entrepreneurship Center, which is attached to Assistance of Research and Technology in universities, can be transformed into a new structure in which the new structure includes the entrepreneurship core of departments, the core of entrepreneurial professors, the core of entrepreneurial students and the core of entrepreneurial graduates, each of which can communicate with entrepreneurs, industry and society, ministries and organizations, both independently and through the university. Accordingly, by examining the situation of entrepreneurship education in selected countries and taking into account the conditions of Iranian society, it is necessary to review the educational programs of university entrepreneurship centers. Also, an interdisciplinary approach should be adopted in the entrepreneurship education model of universities or a periodic approach should be used in entrepreneurship education. Schools of Entrepreneurship are established with the aim of unifying the office of industry relations, research vice chancellor and university entrepreneurship center, and special interdisciplinary fields of entrepreneurship such as entrepreneurship management and entrepreneurship education or special courses of entrepreneurship education in fields close to this field in Each educational group should be created or special entrepreneurship training courses for students of different disciplines should be launched. Schools of
Entrepreneurship should be established to communicate with industry, and special interdisciplinary fields of entrepreneurship such as entrepreneurship management and entrepreneurship education or special courses of entrepreneurship education in fields close to this field should be established in each educational group or launch special entrepreneurship training courses for students of different disciplines. The training of professors interested in entrepreneurship should be done in the form of a training workshop or the formation of an association of entrepreneurial professors in universities, and the universities should be in constant contact with entrepreneurs in any specific field. One of the most important limitations of present study was the lack of ease in obtaining the information under study, which limited the possibility of accurate comparison. In some cases, there was information about entrepreneurship education in the study countries that could not be cited and was not related to the criteria desired by the researcher.

References


