

Analysis the importance of entrepreneurship education on the entrepreneurial culture among students in selected Chinese and American Universities

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الملخص:

تعتبر ريادة الأعمال (المقاولاتية) والتعليم الريادي من الأكثر مواضيع إثارة في العقدين الآخرين، وتم الترويج لهما في جميع استراتيجيات الإصلاح الوطنية والتعليمية والسياسية. إذ يستخدم التعليم لإلهام ريادة الأعمال بين الخريجين الشباب حتى يتمكنوا من إنتاج فرص عمل لأنفسهم وأقربائهم. كما يُنظر إلى التعليم الريادي أيضًا على أنه وسيلة للقضاء على الفقر. وعليه، تناقش هذه الورقة تعليم ريادة الأعمال من خلال عرض مختلف الأدبيات الخاصة، وكذا أهميتها ومنافعها، وضعها ومكانتها على الصعيد العالمي، الإشارة لتجارب ومناهج بعض الجامعات المنتقاة في الصين والولايات المتحدة الأمريكية.

الكلمات المفتاحية: ريادة الأعمال، التعليم الريادي، الصين، الولايات المتحدة الأمريكية.

Abstract:

Entrepreneurship and entrepreneurship education are two very discussed topics in the last years, promoted in all the national and educational and political reform strategies. Education is used to inspire entrepreneurship among young graduates in order for them to be able to produce job opportunities for themselves and their peers. Education is also seen as a method to eradicate poverty. Hand in hand, entrepreneurship and education plays a vital role and has been an interest of researchers. Therefore, this paper discusses entrepreneurship education through two case studies, it has summarized the characteristics of university students and business education mode in China and the United States. It based on the comparative analysis of the results of Countermeasures and pointed the Chinese University System of entrepreneurship education.

Keywords: entrepreneurship, entrepreneurship education, China, USA.

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1. Introduction:

Entrepreneurship and innovation are increasingly recognized as important drivers of economic growth, productivity and employment, and as a key aspect of economic dynamism. Entrepreneurship education has been an increasingly critical element in education recently. Because education affects societies, higher education institutions provide entrepreneurship education degrees, courses, training programs, and learning-by-doing workshops for several purposes on different individual, university, national, and international levels to support society. As a result, this article mainly studies following two questions;

What entrepreneurship education is in place in Further Education and Higher Education? What are the benefits of entrepreneurship education?

Higher education is at the pinnacle of education and largely determines its quality. Any changes in the society tend to be reflected in the curricula of higher education institutions, Therefore, two countries (USA & China) are represented in this paper not simply to analyses the global state of entrepreneurship education but also to have a global view of entrepreneurship across very different countries.

2. What is entrepreneurship education?

It is imperative to know that youths are the future generation and proper youth development leads to better nation in the future. (Syarizal, M, & Ho , 2014). Therefore, many experienced business people political leaders, economists, and educators believe that fostering a robust entrepreneurial culture will maximize individual and collective economic and social success on a local, national, and global scale. (National Content standards for entrepreneurship education, 2021).

The basic goal of entrepreneurship education is to foster the entrepreneurial culture among students. In this sense, entrepreneurship education refers to the „pedagogical process involves in the encouragement of entrepreneurial activities behaviours and mindset (Syarizal, M, & Ho , 2014). Whereby students (of all types) practice creating, finding, and acting on opportunities of creating value (Patricia , Candida , Elaine , Heidi , & Sam, 2020). By developing skills including taking the initiative, decision making, problem solving, networking, identifying opportunities and personal effectiveness. Enterprise provision can be applied to all areas of education, extending beyond knowledge acquisition to a wide range of emotional, social, and practical skills; (Naomi , Shane , & Stephanie , 2013).

Importantly, the decisions around entrepreneurship education include everything from learning objectives, topics covered, selection of materials (including cases, exercises, and concepts), pedagogy, and delivery mechanisms (Rosni, Md , & Jocelyne , 2015)

On the other hand, entrepreneurship education aims to develop in an individual the innovative spirit of an entrepreneur; namely, a creative attitude that calculates risk, is adept with their environment, sees values of business propositions for themselves and the society at large, while seeking and making good use of opportunities.

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The divergent definitions of the term entrepreneurship education may have been led by the type of teaching purposes. Hence, some scholars focus on encouraging students in learning environments to start new businesses (Nielsen & Gartner, 2017), others focus on developing students' skills (e.g., creativity, risk taking) and through project-based learning approaches (Zhao, 2012), whereas others focus on values creation (Lack  s, WilliamsMiddleton, 2015; Matlay, 2006).

For this purposes, four questions have to be answered to define entrepreneurship education: who to teach and who will teach; what to teach; where to teach; and how will it be taught. The 2009 World Economic Forum report entitled "Educating the next Wave of Entrepreneurs" answered these four questions, as summarized in Table 1.

Table 1: Key Areas in Entrepreneurship Education

Key Areas	WHAT Program Content	WHO The Stakeholders
Elements	Entrepreneurial behaviour and mindset. Self-confidence, self-efficacy, and leadership. "Out of the box" thinking through creativity and innovation. Managing complexity and unpredictability. Business skills and literacy Opportunity identification Negotiation skills Building relationship, network, and social capital	Students Teachers and school administrators Professors, trainers Business people and leaders in other sectors Entrepreneurs Mentors, coaches, and advisors
	WHERE Organizations	HOW Methods of Delivery
	Formal School System (Primary, Secondary, and Tertiary) – At all levels – Across disciplines – Compulsory and elective courses Informal system – Local schools, training institutions – Community centres and NGOs	Interactive learning pedagogies Multi-disciplinary programs and projects Case studies, games, simulations, business plan competition Extensive use of visuals, digital tools, and multi-media Projects, internships and start-ups Mentoring and coaching

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	– Government agencies and banks – Workplace-based training programs - Life-long learning	Interaction with entrepreneurs
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Source: (National Content standards for entrepreneurship education, 2021)

‘Where’ is to identify which level is best to introduce entrepreneurship education, ‘how’ is the procedure and curriculum used. These topics are rather popular choices for research topics and there are not much conclusive findings on the procedures and curriculums used to project entrepreneurship education to students and individuals (Rosni, Md , & Jocelyne , 2015).

3. Benefits of Entrepreneurship Education

The Consortium for Entrepreneurship Education -sponsored Think Tank recently worked on group consensus about the different outcomes for entrepreneurship programs at various levels of education. The Think Tank is a voluntary "future thinking" group composed of a wide selection of educators who are practitioners in a variety of settings, educational levels, and locations throughout the US and beyond. While the results are not based on formal scientific research, they are provided here for the purposes of discussion and orientation to the concepts underlying the National Content Standards for Entrepreneurship Education.

Table.2 Benefits of Entrepreneurship Education

Benefits to Elementary Students	Benefits to Middle School Students
Increased attendance Higher academic achievement • Standardized Tests • Pre & Post Tests • Portfolio Fewer discipline referrals Increased sense of "locus of control" Awareness of career and entrepreneurial options. Acquire basic economic understanding Acquire basic financial concepts Define entrepreneurs' contribution to society	Continue on to high school Improved academic skills - 4 Rs Experience entrepreneurship across the curriculum Increased self-esteem and respect Increased number of students identifying entrepreneurship as a career choice Heightened awareness of the role of entrepreneurs Encourage risk-taking & learning from failure Learn to identify and recognize opportunities Decrease in teen pregnancies and substance abuse Improved economic literacy and understanding of capitalism

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Use opportunity recognition/ problem solving skills Explore ethics issues Consider steps in business start-up	Improved financial literacy Develop workplace literacy Understand entrepreneurship process/ business plan Become an educated, empowered consumer Learn about opportunity cost Embrace diversity/ socialization skills Demonstrate conflict resolution/ negotiation/sales-marketing/ persuasion skills Learn how entrepreneurs give back Learn how to make money Recognize the contributions of entrepreneurs (they started small) Foster and value idea generation
Benefits to High School Students	Benefits to Post-Secondary and Adult Students
Creation of entrepreneurial thinkers who also have the skills and tools to start their own businesses. Write a business plan Apply economic principles Determine individual entrepreneurial interests Apply basic marketing skills Use strategies for idea generation Assess feasibility of ideas Manage risk Identify legitimate sources of capital Evaluate ownership structures Translate problems into opportunities Apply principles of human relations management Speak "business" & "entrepreneurship"	Demonstrate skills in business startup Demonstrate skills in maintaining business longevity Demonstrate knowledge of business closings versus failure Ability to find next level of training or access other resources and services Demonstrate business management/ operation skills. Use components of a business plan Determine impact on unemployment Changed attitude toward entrepreneurship as a means of making a living Changes in personal and career attitudes including • Self-worth • Ability to control one's own life • Self-awareness

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Apply basic accounting principles	
Engage in ethical business practices	
Demonstrate financial management	• Self-management/personality responsibility • Transfer of learning • Motivation • Teamwork • Interpersonal communications • Problem solving • Creativity

Source: (National Content standards for entrepreneurship education, 2021)

In primary education, the adoption of school books, interactive games and online tools has proved to be particularly useful. However, at the secondary and vocational school level, the implementation of awareness campaigns and extracurricular activities designed to help students to understand the world of work, including visits to businesses, is suggested. At higher education level, attending elective and/or compulsory courses on entrepreneurship, and participating in more focused activities and projects, has proven particularly effective. (UNCTAD secretariat, 2011).

4. Entrepreneurial University

Universities play an important role in promoting entrepreneurship and encourage students' inclination towards entrepreneurship. Therefore, the concept of an entrepreneurial university (Kirby, 2006) is one of the outcomes of entrepreneurship education. Universities that teach entrepreneurship open opportunities for faculty, students, and staff to create products/ services from their research that will have commercial value. Commercialization of high technology research outputs (also known as technopreneurship) is being used now as one of the factors in rating universities worldwide (Liu, Li, & Hong, 2019).

Notably, Entrepreneurship in Higher Education, especially within Non-Business Studies are not limited to start-ups, innovative associations and new jobs, since Students from non-business studies have often very interesting ideas. However, they are less trained in sales and marketing. These students may need courses on intellectual property, sales, marketing and venture capital. Therefore, the best way to motivate students from other faculties to learn entrepreneurship is by presenting examples from the field. The emphasis should be placed on essential connections and practicalities (Catalin, Martin, & Iucu, 2013).

Perhaps, more importantly, higher education is not limited to offering entrepreneurship training in business schools only, despite a clear offering for finance and business majors in entrepreneurship coursework and training. Not surprisingly, several studies have indicated that some student groups are impacted by entrepreneurship programs more than other students depending on their backgrounds. On the other hand, universities are also expected to generate their

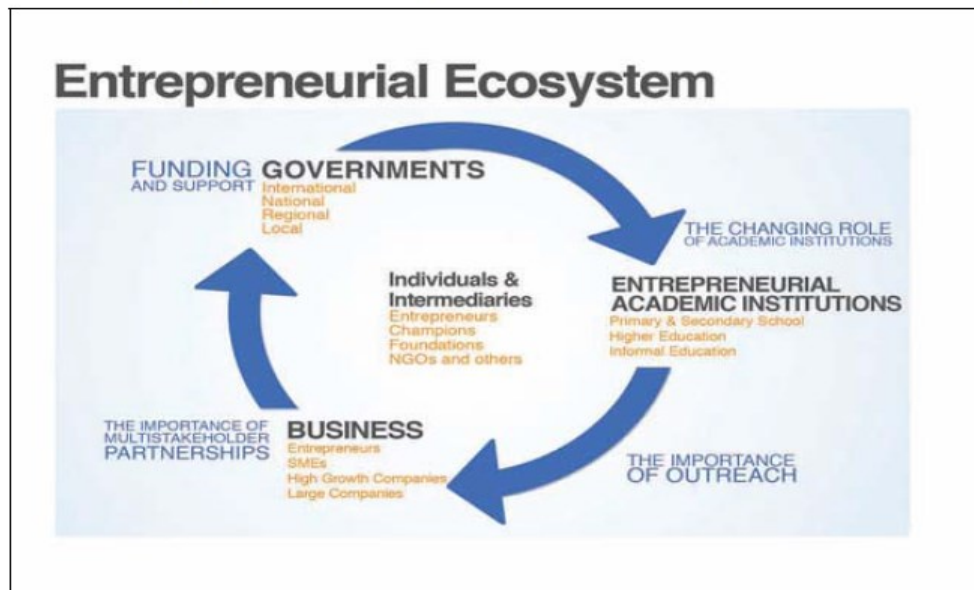
own funds for activities like research, and do this through the commercialization of technologies they have developed (Laukkanen, 2000).

5. Roles of Government

Government influences and supports for entrepreneurship is very crucial to promote the entrepreneurial development in order to guarantee the successful of a business. A comprehensive government approach and support such as loans, business facilities, rules and regulations and etc would definitely a key condition for success in nurturing and promoting entrepreneurship. As a result, the role of government is crucial in creating the proper regulatory framework and incentives to catalyse the involvement of the private sector, education institutions, individuals and intermediaries within an entrepreneurial ecosystem (Syarizal, M, & Ho , 2014).

It is a system of mutually beneficial and self-sustaining relationships involving institutions, people and processes that work together with the goal of creating entrepreneurial ventures. It includes business (large and small firms, as well as entrepreneurs), policymakers (at international, national, regional and local levels), and formal (primary, secondary and higher education) and informal educational institutions. The different stakeholders are involved in a series of symbiotic actions which include awareness and outreach, the development of human capital and critical talent, public– private partnerships, multiple sources of innovation, intellectual property and funding. In a dynamic and growth-generating entrepreneurial ecosystem, there is a high degree of interaction and coordination among these key elements (fig. 1) (Liu, Li, & Hong, 2019).

Figure 1. The entrepreneurial ecosystem



Source : (Liu, Li, & Hong, 2019)

6. Entrepreneurship education policy

Entrepreneurship education policy is closely interlinked with overall entrepreneurship policy as well as economic and social development objectives. It should be therefore reflected in a country's national economic and social development plans or strategies. It is a lifelong learning process, starting as early as elementary school and continuing through all levels of education, including adult education. It should build positive attitudes towards business and develop entrepreneurial competencies to successfully plan, start and manage a business. To effectively implement entrepreneurship education, both top down and bottom-up approaches are necessary. Top-down approaches require the commitment of the most senior policymakers. Building this commitment is not easy – often entrepreneurship education has to be framed within the context of its contribution to economic and social growth to attract the proper attention. Bottom-up approaches require champions at the local or regional level who can help drive initiatives on the ground (UNCTAD secretariat, 2011).

7. Global Entrepreneurship Education

The importance of entrepreneurship education as part of the global sphere became exceptionally clear in 1998 when the UNESCO World Conference advocated for the development of entrepreneurial skills through higher education (Zhou & Xu, 2012).

More recently, reports such as the Global Entrepreneurship Monitor position entrepreneurship education as a necessary factor in the advancement of innovation and entrepreneurship (GEM, 2015). According to the latest GEM authors, "In building an entrepreneurial culture, education and media play crucial roles, particularly regarding the education of very young people (on primary and secondary levels). If a country wants to be more proactive in developing an entrepreneurial culture, it is relevant to implement consistent policies and programs on restructuring the capability of the education system toward providing entrepreneurial competences as a kind of transversal skills for everyone" (Patricia , Candida , Elaine , Heidi , & Sam, 2020).

8. Entrepreneurship Education in China

In recent years, the Chinese government issued new policies to boost employment through entrepreneurship, and, since that time, governments at each level have advocated entrepreneurship education. Semigovernmental agencies such as the National Youth League and the National Labour Union have provided training programs on entrepreneurship. Non-government organizations also are giving much attention to entrepreneurship education. Meanwhile, entrepreneurship education has also emerged online in the form of MOOCs, broadening its availability.

Overall, China's entrepreneurship education remains in the early stage, and China still has to refine the concept, set up an insightful and visionary strategic framework at the national level, create an integrated curriculum across disciplines, with an intensified training program for faculty to build a closer link between the academy and the industry, and establish a sound process to evaluate the impact of entrepreneurship education on a regular basis (Patricia , Candida , Elaine , Heidi , & Sam, 2020).

Despite a relatively short history of entrepreneurship education, China has made considerable progress with this new education concept, marked by four stages since its emergence in the late

1990s. The first stage was the Student Entrepreneurship Competition organized by Tsinghua University in 1997, which became known as the birth of entrepreneurship education in China. In the following years, many universities introduced similar events. The second stage was achieved in 2002, when the Ministry of Education took the lead in selecting nine institutions to participate in the National Entrepreneurship Education Pilot Program (NEEPP), with the stated purpose of exploring a number of entrepreneurship education models. Each of the nine pilot projects had a different focus, from classroom-based models to practice oriented models to hybrid models. The third stage occurred in 2005 when the Know About Business (KAB) program, developed by the UNESCO Labor organization, was introduced and became available to students in six prestigious universities. As a systematic entrepreneurship education program, KAB helps students gain an overall understanding of how to start an enterprise, promotes the concept of entrepreneurship, and cultivates innovation and entrepreneurship in talented youth. In the fourth stage (2008), The Ministry of Education and the Ministry of Science and Technology jointly initiated pilot programs for innovation and entrepreneurship, such as Entrepreneurship Park and Science Park, in selected universities (Rosni, Md , & Jocelyne , 2015).

The Ministry of Education ordered the nine institutions pilot of entrepreneurship education include Tsinghua University, Beijing University of Aeronautics and Astronautics, the Chinese People's University, Shanghai Jiaotong University, Nanjing university of Economics, Wuhan University, Xi'an Jiaotong University, Northwestern University, Heilongjiang University.

The general practice of enterprise Education pilot: First, creating the courses of entrepreneurial education so that teach the students how to entrepreneurship. Second, conforming the request of entrepreneurship education and intensifying the reform efforts of the first classroom teaching. It stressed that the aim of the entrepreneurship education is to cultivate the student's awareness of entrepreneurship, build the knowledge structure which is necessary for the business, and improve the overall quality of students.

China's business education has also formed three models: The first mode, the representative is the Chinese People's University, it stressed that the aim of the entrepreneurship education is to train the students awareness of entrepreneurship, build the knowledge structure which is necessary for the business, improve the overall quality of students," combine the first class with the second class to develop the entrepreneurship education. And encourage the students to participate in the various social practice activities and social welfare activities in a creative way , through some kinds of seminars of entrepreneurship education and various competitions and activities, finally form a Practice groups of "entrepreneurship education "which use the professional as the basis, the project and associations as the organization form The second mode, the representative is Beijing University of Aeronautics and Astronautics, the aim is to improve the student's business knowledge, focus on the entrepreneurial skills. Its characteristics are commercial operations, establish the university students Pioneering Park, teach the students how to carve out and provide financial support and advisory services for the student's entrepreneurship. Schools have set up a "institutes of business management training " which is responsible for the matters relating to students, the school also set up the venture capital of 3 million, after the assessment of the student's entrepreneurship plan book to begin the financing of period of seed. The third mole, Shanghai Jiaotong University as the representative of the Integrated Enterprise Education. On the one hand, the innovative education as

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the foundation of entrepreneurship education, In the process of Expertise teaching, we should focus on the basic quality of the students. On the other hand, we should provide students with the necessary finance and the necessary technical advice. Our School has put in more than 8,000 million to establish a number of experimental centres and innovation base, so that the students can train their practice ability. From the establishment of the graduate school students' entrepreneurship has been assigned to the "Hui Gu " technology start-ups base in Shanghai (Liu, Li, & Hong, 2019).

Table 3: Comparative Study for Entrepreneurial Education Model of Chinese University

University Name	Aim of cultivating	Mode of cultivating
Renmin University of China	Trains the student to start an undertaking consciousness	Unify the first classroom and the second classroom
Beijing University of Aeronautics and Astronautics	Pays great attention to enhance student's undertaking knowledge and the undertaking skill	Commercialization operation
Shanghai Jiaotong University	Trains the student the Comprehensive undertaking quality comprehensively	Provides the fund and the technical advisory work for the undertaking.

Source: (Liu, Li, & Hong, 2019)

9. Entrepreneurship Education in China

Entrepreneurship is deeply-rooted in the history and culture of the United States, a nation founded, explored, and settled by risk-embracing people seeking new opportunities. It continues to have widespread appeal to the US population, as evidenced in a recent study indicating that more than 70 percent of Americans would prefer being an entrepreneur to working for someone else, attitudes confirmed by GEM reports (GEM, 2013). In 2009, The Economist declared the United States "a beacon of entrepreneurialism," and a study of 20 leading global economies found that the US was one of the most favourable entrepreneurial environments in the world (EY, 2013). This strength is based on multiple factors that create a supportive and robust ecosystem for entrepreneurs (Patricia , Candida , Elaine , Heidi , & Sam, 2020):

- Culture: In addition to an historic culture that celebrates the US as the "land of opportunity," the entrepreneurship culture offers an attractive model of the future of work.
- Legal/regulatory context: Patent, property, labour, and bankruptcy laws facilitate business formation and dynamic evolution.
- Immigration: Although immigration policy is seen as restrictive, aspiring entrepreneurs are eager to take advantage of the attractive and conducive ecosystems.

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- Financial markets: Robust and innovative funding sources such as venture capital, angel investors, and emergent crowd-funding markets facilitate access to capital.
- “Venturesome” consumers: Consumers who are willing and eager to try new products and support local entrepreneurs.
- Engaged academic institutions: US universities play a critical and growing ecosystem role, fostering entrepreneurship through business incubators, venture funds, and rapidly expanding focus on teaching entrepreneurship.

the strong foundation for entrepreneurship endures, and the United States has witnessed a surge in interest in entrepreneurship over the past decades across academic institutions, foundations, and government policy makers, all of whom see entrepreneurship as a vehicle for economic development and job creation. Entrepreneurship has been one of the fastest growing subjects in undergraduate curricula as the number of university courses has expanded from 250 in 1985 to more than 5,000 today. The subject has also been gaining increased attention in secondary schools and even among younger students, through such programs as Lemonade Day®, a national curriculum through which K through 12 students learn and practice entrepreneurship by starting their own lemonade stand businesses. Numerous private and public institutions offer a variety of practical entrepreneurship programs for individuals who are starting their own businesses. The Kauffman Foundation allocates substantial resources to support entrepreneurship research and to sponsor events such as “Global Entrepreneurship Week,” and the Goldman Sachs Foundation has pledged more than \$500 million (USD) to provide entrepreneurship education to 10,000 entrepreneurs in the US. State governments have taken the lead in introducing policy initiatives to foster entrepreneurship, often through programs focused on regional economic opportunities, such as the Scale Up Milwaukee Project, a public/private partnership supporting small business growth that is now in its third year (Dianne & Mariana, 2011).

In the earliest developed entrepreneurship education model cases and the most comprehensive universities in the United States, Babson College, Harvard University, Stanford University have their own ways, represent a typical model of entrepreneurship education.

Table 4: Comparative Study for Entrepreneurial Education Model of American University

University name	Keystone of cultivating	Tenet of cultivating	Mode of cultivating
Babson College	Pays great attention to raise student's undertaking consciousness	Trains the student to start an undertaking the thought , the risk spirit, the flexibility	Support the undertaking education through the innovative plan of instruction and scholarly

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			research
Harvard University	Pays great attention to raise student's actual managerial experience	Enhances the undertaking skill	In view of the undertaking management, establishing complete material and the case storehouse in order to provide the good learning environment for the researcher
Stanford University	Pays great attention to raise the student system's undertaking knowledge	Causes the student to master the solid and systemic undertaking knowledge	Grasps various stages and various planes strategy in the undertaking process

Source: (Liu, Li, & Hong, 2019)

10. Conclusion

Entrepreneurship is now known as a factor that widely contributes to the country's economy. Education is also seen as being able to alleviate the economy of a country. Entrepreneurship and education are both important tools in improving a country's current economic state. It became apparent to most educators that entrepreneurship is something that can be taught; discrediting the idea that entrepreneurship is born and not made

Entrepreneurship education is an effective tool that can stimulate the entrepreneurial mindsets of young people, encourage innovative business start-ups, growth of small and medium sized businesses, and foster an entrepreneurial culture throughout the population.

Entrepreneurship education has the possibility to stimulate consciousness towards self-employment as a career option; there are implications that the consciousness towards self-employment inspires young people to equip themselves with the knowledge, skills and experience needed to acquire a successful business. It is referred as a legitimate programme that is done to prepare students with the required skills and knowledge to be able to identify opportunities, understand a customer's perception, generate new ideas and developing business plans, as well as understanding and evaluating environmental, institutional and political issues.

China is one of the countries that have an emerging economy. Therefore, the development of entrepreneurship has become the main agenda which is evident by the introduction of mechanism that cater for entrepreneurs.