

# *Models and Enlightenment: Innovation and Entrepreneurship Education Ecology—A Case of SEGi University Malaysia*

Yincheng Long<sup>1</sup>, Wei Xing<sup>1</sup>, Shaoyi Liu<sup>2</sup>, Cheemun Wong<sup>2</sup>

<sup>1</sup>Nanjing Vocational College of Information Technology, Nanjing, 210023, China

<sup>2</sup>SEGi University, Kuala Lumpur, 47810, Malaysia

**Keywords:** Innovation and Entrepreneurship; Education Ecosystem; Global Leadership; Model; Enlightenment

**Abstract:** Innovation is the process of putting new things and new ideas into practice. Entrepreneurship is the activity of combining entrepreneurial spirit with opportunities to create value. In the knowledge economy era of the 21st century, the driving role of innovation in economic and social development becomes increasingly significant and the innovation model has begun to shift to the construction of the innovation ecosystem. Through the introduction of innovation and entrepreneurship education ecosystem and the innovation and entrepreneurship education model of SEGi University in Malaysia, this paper summarizes experiences, establishes reference patterns, and contributes to the achievements of outstanding practices in various fields.

## 1. Relevant Definitions of the Innovation and Entrepreneurship Education Ecosystem

### 1.1. What is Innovation and Entrepreneurship Education

Innovation is the process of putting new things and new ideas into practice. The essence of entrepreneurship is first of all creation, which is the activity of entrepreneurs rich in entrepreneurial spirit to combine with opportunities and create value (with some definitions of entrepreneurship, see Table 1). Entrepreneurship education refers to the education that develops and improves the basic quality of entrepreneurship among young people and cultivates socialist builders and successors with pioneering personalities [1]. In the 1980s, numerous scholars joined the ranks of innovation and entrepreneurship research, and it emerged as an academic research field. Over the subsequent decades, it has experienced rapid development. However, there is still no unified definition in the academic community for the concept of innovation and entrepreneurship education. Therefore, the core meaning of innovation and entrepreneurship education should focus more on its broad connotation.

In a broad sense, innovation refers to a certain process which is not only economic behavior, but its nature is a purposeful creative practical activity, breaking through the traditional economic paradigm of innovation and economic growth, and transcending the traditional academic view that innovation is the pursuit of economic value, and that innovation should include scientific innovation, technological innovation, institutional innovation, and so on. Broad entrepreneurship, not only the

establishment of new enterprises, it also has economic, political and social significance. It incorporates both "internal entrepreneurship" and "external entrepreneurship" into the field of entrepreneurship research. It utilizes various resources to create economic value and social value, corresponding to entrepreneurship and maintenance. It is evident that innovation is not entrepreneurship, but innovation and entrepreneurship are closely related, and mutual promotion and constraints each other, forming a dialectical unity. As Jeffrey Timmons said, if entrepreneurship is compared to the engine of the U.S. economy, then innovation is the cylinder of this engine, which led to the birth of important new inventions and technologies [2].

Innovation education is focused on cultivating students' innovative spirit and practical capabilities as its fundamental value orientation, while entrepreneurship education is aimed at developing and enhancing people's basic entrepreneurial qualities, fostering entrepreneurial awareness, and forming preliminary entrepreneurial abilities [3]. Innovation and entrepreneurship education not only internally encompasses the scientific connotations of "innovation education" and "entrepreneurship education" but is not simply equated with the two. It is a comprehensive education system that showcases national strategies, expresses societal needs, emphasizes essential regulations, clarifies value orientations, and becomes a new educational philosophy and model guiding the direction of higher education reform and development in the new era.

Table 1: Definitions of Entrepreneurship

Source	School of Thought	Definition
Cantilon ,1755 Knight ,1921	Risk Proponent	Entrepreneurship is the undertaking and utilization of risks.
Schum Perter ,1934	Innovation-oriented	Entrepreneurship is the realization of new combinations within an enterprise organization—new products, new services, new raw materials, new production methods, new markets, and new organizational structures.
Peter Ferdinand Drucker ,1909	Behavior and Management School	Entrepreneurship is a systematic task that can be organized and, in fact, requires organization. The entrepreneurial process is essentially carried out by certain management procedures.
Jeffry A. Timmons	School of Thought on Thinking and Leadership Art	Entrepreneurship is a method of thinking, reasoning, and action, characterized by opportunity-driven behavior that emphasizes a balanced approach between methodology and leadership.
Howard Stevenson	Opportunity School	Entrepreneurship is a dynamic process of creating and growing wealth, exploring opportunities beyond existing resource boundaries.
Justin G ·Longenecker	Founder School	Entrepreneurship is the process of founding a completely new enterprise.
Saxenian	Sociological School	Entrepreneurship is an activity that continually emerges based on dense social networks, an open talent market, and a regional social culture that encourages risk-taking.

## 1.2. What is the Innovation and Entrepreneurship Ecosystem

Entering the 21st century knowledge economy, the driving role of innovation on economic and social development has become increasingly significant. Moreover, the innovation model is shifting towards the creation of innovation ecosystems. In 2003, the U.S. President's Council of Advisors on Science and Technology (COST) officially proposed the concept of a national innovation ecosystem. In 2013, the European Union's "Dublin Declaration" deployed a new generation of innovation policies also focusing on innovation ecosystems. China has also actively paid attention to and explored

innovation ecosystems. In 2011, the Ministry of Science and Technology (MOST) held an "Innovation Roundtable Conference" to discuss the topic of "Innovation Ecosystem." Currently, the innovation ecosystem has become a new paradigm for innovation, and a series of research results have been generated [8] (see Table 2).

Table 2: Summary of Components of the Entrepreneurship Ecosystem

representative author	constituent elements
Neck et al.	Hatchery organizations, formal networks, informal networks, infrastructure, and cultural factors
Spilling	Significant entrepreneurial events, entrepreneurial roles, environmental factors, and the quality of the entrepreneurial ecosystem are determined by the abundance of entrepreneurs with extensive entrepreneurial experience.
Isenberg	6 Regional Analysis Framework: Culture, Policy Guidance, Financial Capital, Human Capital, Market, Support Services.
Vogel	3-Dimensional Health Assessment: Entrepreneurial Foundation Factors: Infrastructure, Management and Policies, Market, Innovation, Regional Environment; Relevant Environmental Factors: Financial Services, Entrepreneurship Education, Cultural Atmosphere, Network Services, Entrepreneurial Support, Openness; Personal Factors: Entrepreneurs (Individual or Team)
Mason and Brown	3-Step Progressive Assessment Model: Evaluating the health of the entrepreneurial ecosystem based on factors determining entrepreneurship beforehand, performance during the entrepreneurial process, and the social effects generated by entrepreneurship.

As evident, the interdisciplinary fusion of entrepreneurship management and ecological science has contributed to the development of entrepreneurial ecosystem research. The construction of an entrepreneurial ecosystem requires multifaceted support, including market, policies, funding, talent, culture, and professional support, etc. The great success of Silicon Valley is due to these six "golden rules"[4]. With the increasing maturity of business ecosystem research, there has been substantial progress in related studies. However, there is currently a lack of a unified understanding of the concept of the entrepreneurial ecosystem

## 2. Innovation and Entrepreneurship Education Model at SEGi University

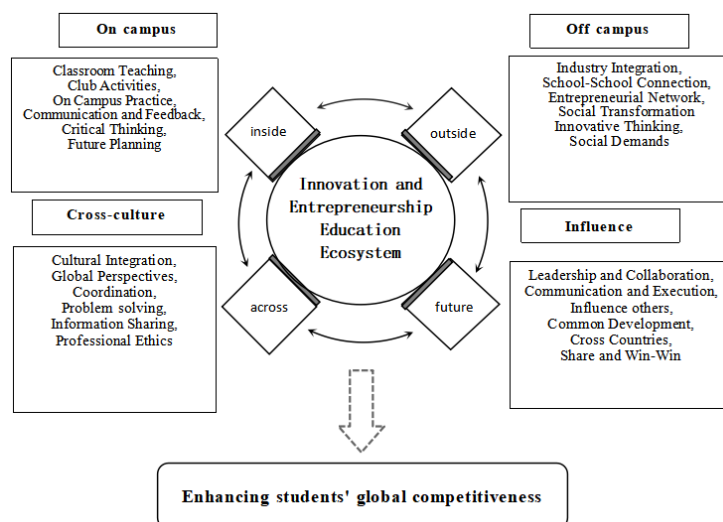


Figure 1: SEGi University Innovation and Entrepreneurship Education Ecosystem

The main feature of SEGi University's ecological construction of innovation and entrepreneurship

education is that it has formed an ecosystem of innovation and entrepreneurship education centered on the goal of cultivating globally competitive talents, with on-campus full-participation innovation and entrepreneurship education, off-campus innovation and entrepreneurship network platform construction, and cross-cultural fusion and influence enhancement (see Figure 1).

### **3. Insights from the Construction of SEGi University's Innovation and Entrepreneurship Education Ecosystem**

#### **3.1. Talent Cultivation**

With the promotion of the "Belt and Road" strategy, in the training of future talents, first, the school should enhance the innovative thinking, dialectical thinking and emotional IQ management ability of young students, and cultivate team spirit, build team culture, build mutual trust and other [6]. Second, the school should integrate the elements of innovative thinking into the whole-process, all-round and whole-subject education, and actively create an atmosphere full of inclusiveness, creativity, relaxation, freedom and positive atmosphere. Third, the school should enhance its coordination and communication skills, learn to listen to students and be good at communication, and gather students, alumni and entrepreneurs together to build an innovation and entrepreneurship ecosystem covering all levels [7].

#### **3.2. Curriculum Reform**

Enhance the innovation and entrepreneurship curriculum system and practical mechanisms in vocational colleges to cultivate skilled talents that meet future needs:

Integrate resources, schools can incorporate elements of innovation and entrepreneurship into all curricula and offer various forms of practice opportunities.

Innovation and entrepreneurship education is integrated into professional education, integrating the resources of professional groups and building on-campus and off-campus training and practice bases in a resource-sharing manner.

Schools should support a top-level design system to ensure the cultivation of innovation and entrepreneurship general ability in the process of talent training, guide the mutual penetration of innovation and entrepreneurship education and daily education, and stimulate the enthusiasm of students to participate in innovation and entrepreneurship activities.

#### **3.3. Entrepreneurial Ecosystem**

In the future, based on the relaxed and inclusive entrepreneurial ecosystem of Century University, there will be four main aspects: First, the school will promote inspirational success stories to students, providing them with the first lesson in practice.[5] Second, the school will enhance students' experiences in practice, guiding them to identify their roles as social professionals early on. Third, the school will establish a mentoring team composed of "Professional Mentors + Corporate Mentors + Entrepreneurial Mentors" to stimulate students' potential in terms of abilities, interests, and creativity.[8] Fourth, the school will strengthen intellectual property management, aligning it with market demands to facilitate the connection between university research outcomes and market needs.[9] Additionally, to adapt to the employment competition under the "Belt and Road" strategy, innovation and entrepreneurship education will undertake the new task of educational reform in the era of intelligence, constructing a complete innovation and entrepreneurship ecosystem to cultivate globally competitive talents.

## Acknowledgement

1) One of the phased achievements of the 2021 research project on employment and entrepreneurship of college graduates in Jiangsu Province, titled "Research on Enhancing the Employment Competitiveness of Students from Difficult Families", project No.: JCKT-C-20210501.  
2) One of the phased achievements of the "14th Five-Year Plan" project "Research on the Integration of College Graduates' Employment and Industrial Demand" by the Jiangsu Higher Education Association, project No.: YB022.  
3. One of the phased achievements of the 2018 project "Research on Dormitory Community Construction and Nurturing Practices in Colleges and Universities that Receive International Students from Countries Along the 'Belt and Road' - Taking Nanjing Vocational College of Information Technology as an Example" by Jiangsu Higher Education Schools Logistics Association and Jiangsu Higher Education Colleges Student Residence Management and Property Management Professional Committee, project No.: 2018-GW-005.

## References

- [1] Wang Junhua, Fu Yining. "Innovation and Entrepreneurship" Studies in China (2002-2020): A Bibliometric Analysis Based on Journals of Pedagogy in Chinese Social Science Citation Index Directory[J]. Meitan Higher Education, 2021, 39(02):37-44
- [2] Neck H M, Meyer G D, Chen B, et al. An entrepreneurial system view of new venture creation [J]. Journal of Small Business Management, 2004, 42(2):190-208
- [3] Ma Lingang. Research on Innovation and Entrepreneurship Education Based on Theoretical Studies and Practices—Review of "Theory and Skill Guidance for College Students' Innovation and Entrepreneurship" [J]. China Higher Education Research, 2021(09): 99.
- [4] Agu Igwe Paul; Ochinanwata Chinedu. How to start African Informal entrepreneurial revolution [J]. Journal of African Business. Volume 22, Issue 4. 2021. P514-531
- [5] Annual Report on the Quality of Higher Vocational Education in China 2019 [M]. Shanghai Academy of Educational Sciences, Michael Research Institute. Higher Education Press, 2019.
- [6] Long Yincheng. Research on the Construction of Modern Vocational Literacy System Based on Employment Quality Tracking Investigation [J]. Communication of Vocational Education, 2013(08): 48-52.
- [7] Wang Zhiqiang, Dai Yiping. The Path and Characteristics of Israel's Innovation-driven Entrepreneurship Education and Its Enlightenment to China [J]. Renmin University of China Education Journal, 2019(01): 105-118.
- [8] Wang Kang. Research on New Models of Entrepreneurship Education in Universities [J]. Jiangsu Higher Education, 2022 (05): 105-109.
- [9] Chen Ying. The Construction of the Innovation and Entrepreneurship Education Ecosystem Based on the Innovation Culture [J]. Journal of Heilongjiang College of Education, 2017, 36(12): 4-6.