

Research on Cultivating Entrepreneurship Ability of Graduate Students in the Field of Electronic Information

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Abstract. This article aims to explore the generation process of graduate students' entrepreneurial ability in the field of electronic information from three aspects: entrepreneurial awareness, entrepreneurial skills, and entrepreneurial practice, in order to condense the key factors of graduate students' entrepreneurial ability. And then a mechanism and method are established for cultivating graduate students' entrepreneurial ability based on the analysis above.

1. Introduction

With the rapid development of science and technology, the field of electronic information has become one of the most potential industries. Electronic information technology has penetrated into all aspects of modern human social life, such as communication, computer, Internet, artificial intelligence and so on. The development of the technology has not only promoted economic growth and social progress, but also brought great convenience and changes to people's lives. The field of electronic information has the characteristics of rapid development, broad market and high professional knowledge of employees, and these characteristics make it a happy place for entrepreneurs. As top-notch technical talents, graduate students are one of the main forces of the entrepreneurial army. How to cultivate top-notch entrepreneurial talents is a problem that university teachers must think about, and they need to conduct in-depth teaching research and practice on the cultivation of entrepreneurial ability[1]. Entrepreneurship is not only an economic activity, but also a social activity, which involves many factors and conditions. Therefore, for college graduate students, how to cultivate their entrepreneurial ability on the basis of academic research has become the focus of educators and scholars[2].

2. Entrepreneurial ability, and the generation process

The generation of entrepreneurial ability is a complex process that involves many factors and conditions. We think that entrepreneurial awareness, entrepreneurial skills and practice are important factors of entrepreneurial ability.

Firstly, cultivating entrepreneurial awareness is the first step in generating entrepreneurial ability. This requires educators to focus on cultivating students'

entrepreneurial awareness during the teaching process, making them aware of the importance and necessity of entrepreneurship. Entrepreneurial awareness enables people to keenly identify business opportunities and seize them[3]. For example, in the early stages, Huawei provided telecommunication equipments to other companies mainly through OEM. However, Ren Zhengfei, the founder of Huawei, realized that with the growth of the Chinese telecom market and the opening of the global market, Huawei has the opportunity to become the world's leading telecom equipment supplier. He keenly observed the rapid trends in the telecommunications industry and recognized that Huawei can meet the needs of the global market by providing high-quality, innovative products and solutions. Based on this opportunity, Huawei has actively invested in research and development and continuously improved its technological innovation capabilities, making it one of the world's leading ICT suppliers.

Secondly, the learning of entrepreneurial skills is the key to the generation of entrepreneurial ability. This requires educators to design a reasonable curriculum system, pay attention to the combination of theory and practice, and cultivate students' entrepreneurial skills. Entrepreneurial skills can include the following aspects: First, business knowledge and strategy: entrepreneurs need to learn and understand business knowledge, including market analysis, competition analysis, business model, marketing strategy, etc. They need to have the ability to develop strategies and plans, including clear goals, plans, and risk assessment. Second, innovation and creativity: entrepreneurs need to develop innovative thinking and creativity, and be able to develop new business ideas, products or services to meet market demand. They need to learn how to tap into opportunities for innovation, how to respond to change and adapt to rapid changes in the market. Third, leadership and team

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management: entrepreneurs need to learn effective leadership and team management skills, and be able to motivate and manage team members, so that the team can cooperate and operate efficiently. They need to understand human resource management, communication skills, decision-making skills, so as to achieve team synergy. In colleges and universities, on the one hand, to open entrepreneurship introduction courses and theoretical elective courses, but also need to increase the above practice opportunities, such as course design, product production, production practice, participating in science and technology competitions.

Finally, the experience of entrepreneurial practice is the guarantee of entrepreneurial ability generation. This requires educators to provide students with rich opportunities for entrepreneurial practice, so that they can constantly improve and improve their entrepreneurial ability in practice. Based on the students' entrepreneurial practice experience in the author's university, this paper believes that the specific measures of entrepreneurial practice can include the following aspects:

(1) Entrepreneurship mentor system: The school has set up a team composed of senior entrepreneurship mentors to provide students with comprehensive entrepreneurship guidance and guidance. Tuors have rich entrepreneurial experience and can provide professional students with guidance to help them make practical business plans.

(2) Innovation and entrepreneurship education courses: The school has opened a series of innovation and entrepreneurship education courses, aiming to cultivate students' innovative thinking and entrepreneurial consciousness. These courses cover the basic knowledge of entrepreneurship, business model design, marketing, financial management and other aspects, to help students build a comprehensive entrepreneurial quality.

(3) Business incubator and maker space: The school has set up a business incubator and maker space to provide office space and resource support for students. Students can get entrepreneurial guidance, project evaluation, marketing and other support here to promote the development of their entrepreneurial projects.

(4) Entrepreneurship competitions and activities: The school regularly holds various entrepreneurship competitions and activities, such as business plan competition, entrepreneurship project road show, etc. These activities provide students with opportunities to show their entrepreneurial projects, but also provide a platform for them to communicate with investors and entrepreneurs[4].

(5) Start-up capital support: you can apply for start-up capital based on the start-up policies of the local district government. For example, Harbin's "Young Eagle Project" provides financial support for potential students' entrepreneurial projects. Students can get start-up funding to help them start a business and advance the project.

3. The key factor of graduate entrepreneurial ability

The key factors that determine graduate entrepreneurial ability can be analyzed from both internal and external aspects. Internal factors refer to the characteristics and abilities of the individual itself, while external factors refer to the influence of the environment and resources. These key factors will be detailed below.

3.1 Internal Factors

(1) Entrepreneurial willingness and determination: The key to graduate students' entrepreneurial ability lies in whether they have strong entrepreneurial willingness and determination. For entrepreneurs, entrepreneurship is a risk, and requires enough confidence and perseverance to face challenges and difficulties. Graduate students already have solid professional knowledge and research ability in the academic field, but in order to make a difference in the field of entrepreneurship, they also need to have the desire and pursuit of entrepreneurship. Having a strong entrepreneurial will means that graduate students are willing to give up stable employment opportunities, choose the uncertainty and risk of entrepreneurship, and pursue their entrepreneurial dreams. The road to entrepreneurship is not smooth, there will be various difficulties and challenges, and you need to have enough determination and perseverance to overcome difficulties and persistently pursue your goals. Only with firm determination and perseverance can graduate students continue to move forward and succeed on the road of entrepreneurship.

(2) Knowledge structure: Knowledge is the cornerstone of entrepreneurship, while knowledge structure is the core of entrepreneurial ability. For graduate students, they need to have certain theoretical knowledge, skills knowledge and practical knowledge on the basis of academic research. Theoretical knowledge is the guidance of entrepreneurship, which provides a clear direction for entrepreneurs. Skill and knowledge is a tool for entrepreneurship, providing a means for entrepreneurs to achieve their entrepreneurial goals. Practical knowledge is the experience of entrepreneurship, which provides a guarantee of successful entrepreneurship for entrepreneurs.

(3) Innovation ability and creative thinking: Innovation ability is the ability of graduate students to propose unique and innovative solutions when facing problems. In the process of entrepreneurship, various difficulties and challenges may arise, requiring graduate students to be able to flexibly apply their existing knowledge and experience and propose innovative solutions. This innovative ability not only involves solving technical problems, but also includes innovation in market demand and business models. Complementing innovation is creative thinking. Creative thinking refers to the ability of graduate students to think about problems in unconventional ways and propose novel viewpoints and ideas. In the process of entrepreneurship, graduate students need to have sharp insight and creative

thinking, be able to see the opportunities behind problems, and propose unique solutions. The cultivation of creative thinking can stimulate the creativity and imagination of graduate students through conducting creative training and activities.

(4) Personal quality and ability: The development of graduate entrepreneurial ability is also closely related to personal quality and ability. This includes leadership, teamwork skills, communication skills, decision-making skills, pressure resistance. Graduate students with these qualities and abilities are more likely to succeed in the entrepreneurial process.

(5) Learning ability and self-development: the formation of graduate entrepreneurial ability is also related to its learning ability and self-development. Graduate students need to have the mentality of continuous learning, constantly improve their professional knowledge and skills, and also pay attention to industry trends and market changes in order to better cope with the challenges of entrepreneurship.

(6) Entrepreneurial experience and knowledge: The improvement of graduate students' entrepreneurial ability also requires the accumulation of practice and experience. Participating in entrepreneurial projects, internship experience, industry exchanges and other activities can help graduate students understand the entrepreneurial process and actual operation, and accumulate relevant entrepreneurial experience and knowledge.

3.2 External Factors

(1) Entrepreneurial environment and opportunities: External environment plays an important role in the development of graduate students' entrepreneurial ability. Entrepreneurial environment includes policy support, laws and regulations, entrepreneurial culture and other factors. Good entrepreneurial environment and opportunities can provide more resources and support for graduate students.

(2) Capital and resource support: The capital and resources needed for entrepreneurship have an important impact on the entrepreneurial ability of graduate students. Start-up capital, technical support, marketing and other resources in the early stage of entrepreneurship are the key elements needed by entrepreneurs. Support from governments, schools and investment institutions can provide more resources and funding for graduate students.

(3) Entrepreneurship education and training: The improvement of graduate students' entrepreneurial ability also needs the support of entrepreneurship education and training. Schools and entrepreneurial institutions can provide entrepreneurship courses, training programs, mentors and other forms of support, to help graduate students understand the entrepreneurial knowledge and skills, and improve their entrepreneurial ability.

(4) Entrepreneurship network and partners: Graduate students can obtain more support and resources by establishing entrepreneurial network and partnership in the process of entrepreneurship. With the industry, thank

you for your question. The following is an analysis of the key factors involved in determining the entrepreneurial ability of graduate students.

4. Training mechanism and method of entrepreneurial ability of top graduate talents

The cultivation of the entrepreneurial ability is one of the important tasks of higher education. In order to cultivate the entrepreneurial ability of top graduate students, it is necessary to establish corresponding mechanisms and adopt effective methods. The following will introduce the mechanism and methods of cultivating the entrepreneurial ability of some top graduate students.

4.1 Culture mechanism

(1) Curriculum setting: Establish a course system related to entrepreneurship, including introduction to entrepreneurship, entrepreneurship management, entrepreneurship strategy and other courses. These courses should cover all aspects of entrepreneurship, including market research, business model design, fund management, and team building, aiming to provide graduate students with a comprehensive range of entrepreneurial knowledge and skills[5].

(2) Mentor system: establish a mentor system to provide professional mentors for top-notch graduate students. Tutors should have rich entrepreneurial experience and professional knowledge, and be able to guide graduate students in the planning and implementation of entrepreneurial projects. Mentors can provide guidance and advice to help graduate students develop their entrepreneurial thinking and innovative abilities.

(3) Entrepreneurial practice base: establish the entrepreneurial practice base and provide entrepreneurial resources and support. The practice base can cooperate with industry enterprises to provide practical entrepreneurial opportunities and projects for graduate students, so that they can learn and grow in practice.

(4) Entrepreneurship competitions and activities: Organize entrepreneurship competitions and activities to encourage graduate students to participate in entrepreneurship and innovation. Through competitions and activities, graduate students' innovative potential and competitive consciousness can be stimulated, and their entrepreneurial ability and practical experience can be improved.

(5) Capital and policy support: to provide venture capital and policy support for top graduate students. The government, schools and investment institutions can provide start-up funds, start-up loans and subsidies to provide financial guarantee for graduate students to start their own businesses.

4.2 Culture method

(1) Carry out entrepreneurship education: to cultivate the entrepreneurial ability of top graduates through entrepreneurship education. Entrepreneurship education can include entrepreneurship courses, training courses, lectures and other forms, to provide graduate students with entrepreneurial knowledge, skills and case analysis, and to cultivate their innovative thinking and entrepreneurial consciousness.

(2) Practice projects: Organize graduate students to participate in entrepreneurial practice projects, and let them personally experience the entrepreneurial process themselves. Practical projects can cooperate with enterprises, allow graduate students to participate in real entrepreneurial projects, understand the challenges and opportunities of entrepreneurship, and exercise their entrepreneurial ability.

(3) Teamwork: Encourage graduate students to work in teamwork, cultivate cooperative spirit and teamwork ability. Entrepreneurship often requires teamwork, through which graduate students can develop their leadership, communication skills and decision-making skills.

(4) Cultivation of innovative thinking: cultivate the innovative thinking of graduate students, and stimulate their creativity and innovative ability. Innovative thinking training activities, such as creative workshops and brainstorming, graduate students can exercise their innovative thinking and problem solving ability.

(5) Practice orientation: Combine entrepreneurial ability training with practice, so that graduate students can learn and grow in practical operation. Practical activities can be organized, such as entrepreneurship practical training, field visits, etc., so that graduate students can understand the actual situation and challenges of entrepreneurship, and cultivate their practical ability and coping ability.

5. Conclusion

In view of the future entrepreneurial ability of graduate students in the field of electronic information, entrepreneurial consciousness is one of the core factors of entrepreneurial ability, entrepreneurial skills are an important part of entrepreneurial ability, and entrepreneurial practice is the key link of graduate students' entrepreneurial ability. Colleges and universities can enhance the entrepreneurial awareness of graduate students by adding related courses such as Introduction to Entrepreneurship and providing mentors with entrepreneurial experience. At the same time, colleges and universities should also organize practical projects and entrepreneurial practical training, so that graduate students can learn and grow in practical operation, and exercise their entrepreneurial skills and decision-making ability. In addition, students are encouraged to participate in entrepreneurship competitions and entrepreneurship activities organized by the government and enterprises, stimulate the innovation potential and competitive consciousness of

graduate students, and encourage them to practice and explore bravely. To sum up, through the establishment of mechanisms and methods of entrepreneurial awareness cultivation, entrepreneurial skills cultivation and entrepreneurial practice promotion, it can effectively cultivate the entrepreneurial ability of future-oriented graduate students in the field of electronic information. This will provide strong support and guarantee for their future entrepreneurial road.

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