

Cultivating Innovation and Entrepreneurial Ability of Architectural Animation Students

Pierluca Ferraro

Vanderbilt University, USA

Keywords: Architectural Animation Class, Students, Innovation and Entrepreneurship, Training

Abstract: "Popular entrepreneurship and innovation" has become a new strategy for national economic development. Colleges and universities are paying more and more attention to the cultivation of students' innovative and entrepreneurial abilities, constantly improving the personnel training system, and strengthening students' comprehensive abilities. They are aimed at cultivating talents with innovation and entrepreneurship and with innovative and entrepreneurial capabilities. This requires that colleges and universities should continue to deepen the integration of production and education, cultivate and improve students' innovative and entrepreneurial abilities and comprehensive qualities, and comprehensively improve the personnel training model. This article focuses on the study of the cultivation of entrepreneurial abilities of architectural animation students, compares the models and strategies of entrepreneurship education in colleges and universities at home and abroad, summarizes their experience, finds out the problems in the cultivation of entrepreneurship in Chinese college students, and analyzes the reasons for their existence. In view of the national conditions in our country and the characteristics of college students, we will explore new models and propose new strategies to effectively establish a new model for fostering entrepreneurial ability of architectural animation students that suits our national conditions.

1. Introduction

Architectural animation major is an interdisciplinary subject involving two disciplines of architecture and animation. It is a manifestation of applying animation technology to architectural design. This requires students to master animation technology, architecture, environmental design and other aspects of knowledge, and can be comprehensively used to achieve the perfect combination of practicality and artistry. As a newly emerging comprehensive discipline, the training mode of architectural animation students is not mature enough. In the course of theoretical teaching, the curriculum is not systematic enough, and the courses such as animation and architectural design

are often divided into classes. The degree of integration of related disciplines is not deep enough. It is difficult for students to use them comprehensively. In terms of practical teaching, the degree of project is not deep enough and there are few practical projects. Innovation and entrepreneurship awareness and ability are difficult to be effectively trained and exercised, and students' practical operation level is not enough to truly show architectural animation. professional. This paper proposes that the students of architectural animation majors have the problems of insufficient teacher resources, imperfect curriculum, and lack of practical platforms. They propose that measures should be taken to strengthen school-enterprise cooperation, train applied teachers, optimize curriculum structure, and build practical training bases. Improve students' innovation and entrepreneurship.

2. Employment Characteristics of Architectural Animation Industry

2.1. Students Overall Employment Rate Architectural Animation Industry is not High

At the beginning of the 20th century, the prosperity of China's real estate industry and the trend of student employment in architectural majors were good. They were very popular among companies. However, due to the recent economic restructuring in China, the real estate industry has gradually reduced its popularity, and the employment situation of architectural animation students is not as good as before. On the one hand, enterprises, design studios, and universities in the large-scale building animation industry are very interested in outstanding graduates of architectural animation. Currently, the demand for excellent students is not small. On the other hand, professional capabilities are not good enough. Students with unclear understanding of the situation are unmoved by the tension. They are still unrestrained and blindly optimistic. Many graduates have too high expectations for their employment, and some will not even find a suitable and satisfactory position. Choose to stay home.

2.2. The Employment of Students is Unevenly Distributed

Due to the constraints of the actual situation, the political and economic development in various regions is uneven, and in the developed cities and coastal regions where the economy is developed, thearchitectural animation industry is better developed than other regions. Graduates tend to favor employment in these regions. Earlier, there was data showing that since the beginning of the new century, the eastern region has absorbed more than half of the graduates of architecture majors, but it is insufficient for the backward western mountainous regions. 20%.

2.3. Less Architectural Animation Industry, the Number of Graduates Start Their Own Businesses

The country has introduced many policies that are conducive to entrepreneurship and employment for college students. Local governments have established entrepreneurship training bases, business parks, etc. to provide students with a platform to display their talents, so as to encourage students to start their own businesses. Although the entrepreneurial environment has always been good, the entrepreneurial initiative of graduates in the architectural animation industry is limited. Most of them choose to go to a construction company to seek employment instead of choosing to start their own businesses.

2.4. Graduates with High Overall Quality and Strong Application Abilities Are Favored

When a company's company meets the needs of graduates, it attaches great importance to the overall quality of candidates and their practical application capabilities. Those with entrepreneurial spirit, innovation ability, hands-on operational ability, and ability to adapt randomly have a very broad job market. Although the architectural animation industry has been sluggish in recent years, it does not mean that there is no need for architectural animation industry. The architectural animation industry still has its own market, and it also needs the emergence of innovative, sustainable development and high-tech construction industries.

3. The Building Animation Student Innovation and Entrepreneurship Ability Training Status

3.1. Construction Animation Weak Students Business Awareness, and Less Opportunity to Practice

The students of architectural animation have poor psychological quality and are pessimistic about the prospect of entrepreneurship. China's economic development is gradually realizing common prosperity. The family's living conditions are gradually improving. Students generally develop a personality that is afraid of hardship, eagerness for success, and impatience. In the face of a complex market, students are not fully prepared. Most graduates of architectural colleges rely on their parents, have no hands-on ability, and have poor independence and independence. If relatives and friends do not have experience in architectural animation, the road to entrepreneurship will be extremely difficult. Once the road to entrepreneurship begins, it must be a difficult and difficult road. It is full of opportunities and challenges. With successes and failures, some students are afraid of entrepreneurial failure and have no strong psychological qualities. If they fail, they will be despondent and disheartened. My life is too easy, so I don't plan to take risks and I don't have the confidence to start my own business.

3.2. The Idea behind the School's Entrepreneurship Education

The teaching method is simple and does not break through the traditional teaching mode. Regardless of whether it is a college of science and engineering or a liberal arts college, teachers often use slides and blackboards to teach, books are taught, students have less time for class discussions, and are limited in class time. There is almost no organization for students to conduct entrepreneurial social practice. Inspire students' sense of innovation, but also can not exercise the spirit of independent thinking of students. The number of young teachers in institutions of higher education is limited, and the teaching style of teachers for many years is too simple to attract students' attention and improve their interest in learning. Some students believe that entrepreneurial courses are too formal and do not learn useful knowledge. Some students think that teachers only care about teaching textbooks or slides. They neither ask questions to students nor discuss groups. Classroom atmosphere is too boring. There are also some, students feel entrepreneurial class practice is too small, did not participate in practice, blindly learning book knowledge, and can not achieve the best results. From this point of view, schools should speed up the improvement of teaching methods and enrich teaching methods so that students can learn from music and learn from music.

3.3. Architectural Animation Professional Entrepreneurial Social Atmosphere is not Strong, Entrepreneurial Prospects are not Optimistic

In recent years, with the increasing enrollment scale of universities, China's higher education has transitioned from elite education to popular education. The employment of college students has become a hot spot of social concern. The difficulty of employment for architectural animation students is particularly acute. Although China's economy is developing at a moderate rate, the overall national strength has increased, and its international status has increased, there is still a gap between the developed countries and the openness of the domestic market. However, there are risks. The foreign markets are even more complicated, which is not conducive to the self-employment of students or recent graduates. Construction animation industry has narrow employment prospects, and small businesses are not easy to develop. The outlook for the architectural animation profession is still optimistic. The rest of the students believe that the business prospects are generally or blurred. There are even some students who think that they are too pessimistic and have no entrepreneurial market and conditions. The investment environment is not conducive to entrepreneurship.

4. Strategies for Training Students' Creative and Entrepreneurial Ability in Architectural Animation Majors

4.1. Change the Concept of Traditional Innovation and Entrepreneurship, and Strengthen the Education of EQ for Students of Architectural Animation

With the improvement of people's living standards, students' living conditions are becoming more and more advantageous. Students of architectural animation majors hope to find stable and well-paid work such as lawyers, civil servants, and doctors, and they are reluctant to endure hardship, go to construction sites or real estate, etc. The work of enterprises is a matter of high priority, and they are even less willing to start their own businesses with time and effort. Colleges and universities should guide architectural animation students to change the traditional concept of employment, can not be in the status quo, even if civil engineering and other professional business prospects are normal, we must also make great achievements, optimistically and calmly analyze the current situation, develop timely and feasible plans, do a good job Prepare for setbacks and use your own professional strengths to increase your chances of success.

4.2. Change the Traditional Teaching Mode, and Innovate Teaching Methods and Knowledge Content According To the Characteristics of Architectural Specialty

Teachers of innovation and entrepreneurship education should also communicate with each other, discuss class experiences, learn from each other, jointly lead students' progress, and create an excellent teaching staff. The campus has added entrepreneurial practice bases, entrepreneurial associations, etc. The students communicate with each other and enhance the spirit of teamwork. The colleges and universities provide opportunities for students to practice internships in real estate and construction engineering companies. Students often ask successful entrepreneurs to learn lessons and learn lessons for future self-employment. Gain experience. The content of the course should be a transition from a single lecture on entrepreneurial knowledge to a multi-professional course. The content of a professor should not be monotonous. It must be combined with architectural professional knowledge and the current status quo. Professor content should include

entrepreneurial psychology as well as urban planning and civil engineering. Corporate management, corporate training, entrepreneurial law, case studies, etc. The school invites entrepreneurial successful people or entrepreneurial education experts to give lectures. The departments cooperate with each other to improve students' innovation and entrepreneurship.

4.3. Pay Attention to the Practice of Innovation and Entrepreneurship Education and Accumulate Professional Experience in Architectural Animation

The architectural animation colleges and universities need to add suitable learning and practice bases for architectural specialties, create a good entrepreneurial atmosphere, and actively organize students to participate in knowledge contests such as urban and rural planning and garden construction. Knowledge is a ladder of progress. If architecture animation students want to cope with the current situation in which their business prospects are not optimistic, they must also seize all favorable opportunities and learn more about not only construction and project management, but also corporate management, market dynamics, and the state. Policies and other types of books, the Internet at all times concerned about the development trend of real estate companies at home and abroad, and access to relevant information. Develop a study plan to truly understand the significance of building professional entrepreneurship, inspire interest in learning, learn from Chinese music, learn from music, always remember their own wishes, cultivate strong willpower and critical thinking, and humbly engineer and entrepreneurial success Ask for advice, exercise independent thinking and innovation, use more brains and more hands, combine theoretical knowledge and practice, and improve the ability to solve problems independently.

4.4. Increase Social Assistance Efforts on Building an Animation Class of Students, Enhance Their Entrepreneurial Confidence

As a bridge between families and colleges, society needs to provide services for architectural professional students who wish to start a business. Make use of the People's Daily, science and technology newspapers, civil engineering, economic newspapers, and major online media to conduct business promotion, publish real estate business startup success stories, interview successful people and senior engineers, and teach students who have just started an entrepreneurial experience and lessons. The publication of information on professional success in construction projects encourages more and more students to start their own businesses, enhance their entrepreneurial enthusiasm, and seek out partners through the information they release. The entire society forms a good atmosphere for resource sharing and common development.

5. Questionnaire Analysis on Innovation and Entrepreneurship Ability of Students Majoring In Architectural Animation

This paper mainly studies the new mode of building animation students' innovative and entrepreneurial ability training, studies the building animation students' entrepreneurial ability training, compares the entrepreneurial education mode and strategy at home and abroad, summarizes its experience, finds out the problems existing in the cultivation of College Students' entrepreneurial spirit in our country, and analyzes the reasons for its existence. In this paper, by using the form of questionnaire survey, in view of China's national conditions and the characteristics of college students, to explore a new mode of building animation students'

entrepreneurial ability training. In this paper, the method of weighted aggregation is used to analyze the questionnaire data, the specific formula is as follows:

$$A = \sum_{i=1}^{I} \lambda_i \left[\sum_{j=1}^{m} \lambda_{ij} \left(\sum_{k=1}^{n} \lambda_{ijk} a_{ijk} \right) \right]$$
(1)

At the same time, we also use the weighted summary statistical method to process the collected information, the specific formula is as follows:

$$S = \sum_{i=1}^{n} Q_{i} S_{i} (i = 1, 2, ..., n)$$
(2)

Through the collection, understanding, statistics and calculation of the questionnaire information data, we have a clear understanding of the new mode of building animation students' entrepreneurial ability training. As a new comprehensive subject, the training mode of architectural animation students is not mature enough. In the process of theoretical teaching, the curriculum is not systematic enough, animation, architectural design and other courses are often divided into classes, and the integration of related disciplines is not deep enough, so it is difficult for students to comprehensively use. In the aspect of practical teaching, the degree of project is not deep enough, there are few practical projects, the consciousness and ability of innovation and entrepreneurship are difficult to be effectively cultivated and exercised, and the practical operation level of students is not enough to really show architectural animation. It is suggested to take measures such as strengthening school enterprise cooperation, training application-oriented teachers, optimizing curriculum structure and building training base. Improve students' innovation and entrepreneurship ability.

6. Research and Analysis on Innovation and Entrepreneurship Ability of Architectural Animation Students

6.1. Analysis of the Attitude of Architectural Animation Students towards Innovation and Entrepreneurship

At present, our country actively encourages college students to start their own businesses, provides a platform for students to display their talents, and encourages students to start their own businesses. However, the entrepreneurial enthusiasm of architectural animation majors is limited, and most of them choose to go to construction companies to apply for jobs rather than choose to start their own businesses. In this paper, through the form of questionnaire survey, through the collection and collation of questionnaire data, we analyze the innovation and entrepreneurship attitude of students majoring in architectural animation, and the data results are shown in Figure 1.

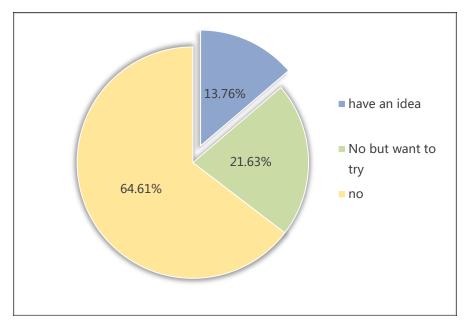


Figure 1. Analysis on the innovative and entrepreneurial attitude of architectural animation students

As can be seen from Figure 1, more than 64.61% of the students majoring in architectural animation have no idea of innovation and entrepreneurship, only 13.76% of them have idea of innovation and entrepreneurship, and 21.63% of them have no idea but want to have a try.

6.2. Research and Analysis on the Innovation and Entrepreneurship Ability of Architectural Animation Students

In order to understand the innovative and entrepreneurial ability of architectural animation students, this paper uses the form of questionnaire survey to study the problems existing in the cultivation of innovative and entrepreneurial spirit of Chinese college students, explores new models, puts forward new strategies, and effectively establishes a new model for the cultivation of entrepreneurial ability of architectural animation students suitable for China's national conditions. The statistics of the questionnaire survey results are shown in Table 1.

Table 1. Research and analysis on innovation and entrepreneurship ability of architectural animation students

		Total	average	Scoring
		score	score	rate
Innovation and Entrepreneurship	Innovation consciousness	12	8.13	67.80%
	innovative thinking	12	9.26	77.20%
	Innovative practice	12	6.78	56.50%
	scientific knowledge	8	4.74	59.30%

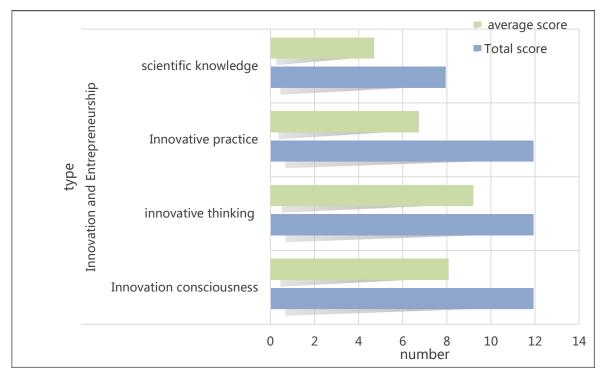


Figure 2. Research and analysis on innovation and entrepreneurship ability of architectural animation students

As can be seen from Figure 2, among the students majoring in architectural animation, the highest average score in the questionnaire survey is innovative thinking, with a score rate of 77.2%, innovative consciousness of 67.8%, scientific knowledge of 56.3% and innovative practice of 56.5%.

6. Conclusion

Under the background of "double creation," the cultivation of college students' entrepreneurial ability has increasingly become a hot topic of education research. The study of the cultivation of college students' entrepreneurial ability not only enriches the theoretical system and content of college students' entrepreneurial ability, but also can the colleges and universities provide entrepreneurial education practice to provide theoretical guidance. Architectural animation industry is an industry related to China's national economy and people's livelihood. According to the current cold situation in China's architectural animation industry, it is urgent to open up a new situation in the architectural animation industry. Entrepreneurship is an upsurge promoted by the country in recent years. It cultivates architectural animation graduates. The entrepreneurial ability is a problem that must be faced by architectural universities and must be studied in depth. Therefore, building a strong atmosphere of innovation and entrepreneurship is acomprehensive plan for cultivating innovative talents for undergraduates.

Funding

This article is not supported by any foundation.

Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

References

- [1]Guo T, Office T D, University X. Exploring and Constructing a New Educational Mode of Undergraduates Innovation and Entrepreneurship with a System of "Five Elements Driving One Cycle". Research & Exploration in Laboratory, 2016.
- [2]Lu C, Zhu H. Comparative study of innovation and entrepreneurship education// International Conference on Computer Science and Education. IEEE, 2017:629-633.
- [3]LIU Gang, LI Qing-liang, WANG Qing-cai, et al. Exploration and Practice of Innovation and Entrepreneurship Education Mode in Forestry Universities. Journal of Zhangjiakou Vocational and Technical College, 2013.
- [4]Ni Dan. Research on the Satisfaction of Chemical Innovation and Entrepreneurship Personnel Training Based on Multi-agent. The Science Education Article Collects, 2014.
- [5]PAN Ye, School of Marxism, Southwest University. The Implications of President Xi's Views of Innovation and Entrepreneurship for Contemporary Youths' Innovation and Entrepreneurship. Journal of Guangdong Youth Vocational College, 2016.
- [6] Rahman Sadeghi Javan. The Relationship between Personality Traits and Entrepreneurial Intentions. Entrepreneurship & Innovation Management Journal, 2014, 2(1):22-33.
- [7]HUANG Sai-li, Putian University. The Difficulties and Breakthrough of Innovation and Entrepreneurship Education of Local University. Journal of Hunan City University(Natural Science), 2016.
- [8] Gao Yafan. Design of Innovation and Entrepreneurship Experience Courses in Higher Vocational Colleges. Logistics Technology, 2016.
- [9] Arvanitis K, Papachristos D P. Web-Based Education Application for Residents of Traditional Mountainous and Faraway Regions. 2015.
- [10]English R, Collins K. Enhancing the Entrepreneurial Spirit in Apprenticeship Education to Develop Craft and Micro-enterprises// 2010.
- [11]Marra J C. Illinois-Based Bank Opens Bilingual Branch. Inside a Public Library. Bridges, 2015.
- [12] Ibrahim N A. Relationship between Entrepreneurial Orientation, Entrepreneurial Skills, Environmental Factor and Entrepreneurial Intention among Nigerian Students in UUM. Entrepreneurship & Innovation Management Journal, 2014, 2(4):203-213.
- [13]He Jianmin, Huang Qian, Liu Yezheng, et al. Explore Methods of Innovation and Entrepreneurship Education in College to Train Creative Talents. China Modern Educational Equipment, 2018.
- [14]ZHANG Ting, YANG Yanfei. On the Development Mode and Implementation Path of Education Innovation and Entrepreneurship of College Students. Pioneering with Science & Technology Monthly, 2018.