An Experimental Study on Cultivation Model of Interdisciplinary Innovative and Entrepreneurial Talents in Internet Sports Industry

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Abstract. Interdisciplinary innovative and entrepreneurial talents can meet the needs of "Internet + sports" Industry development and better serve the local digital economy. Competence-based innovation and entrepreneurship education is a practical and effective teaching model for the artisan cultivation with innovative and entrepreneurial qualities. This article aims to study the craftsmanship talent training model and implement effect of information management and information system specialty. This article analyzes the basic connotation, features, advantages and implement process of craftsmanship talent education is applied innovative and entrepreneurial talents training model. The interdisciplinary undergraduate programs, typified by information management and information systems, have their unique characteristics in promoting innovation and entrepreneurship education. This article proposes a way to build a new model of "artisan" talents training in information management and information system majors to change the traditional Teaching mode to improve teaching quality and enhance students' ingenuity and awareness. Experimental data show that the innovative and entrepreneurial craftsman-type talent training mode are conducive to the cultivation of talents and the storage of innovative and entrepreneurial talents, and can effectively increase the rate of success, the craftsman-type talent training model and information management system have increased the talent reserve of universities by about 23%, and shortened the talent training cycle by about 15%, which has promoted the development of innovation and entrepreneurship education in China.

Keywords: Innovative and Entrepreneurial Talent, Artisan Talent, the Craftsman-type Training Mode, Information Management, "Internet + sports" Industry

1. Introduction
With the rapid development of digital economy, the internet industrial era has entered the next stage. With the continuous development of big data and artificial intelligence (AI), we have entered the era of information and intelligence. High-tech information and communication technology and internet platform promote the in-depth integration of sports related industries, and the new industry of "Internet
"Internet + sports" emerges [1]. Those high information and communication technology have become a powerful means of "Internet + sports" industry and enterprise development. Information management and information system (hereinafter referred to as letter management) major is mainly used to serve information industry, also very related sports industry, needs excellent innovative and entrepreneurial talents.

The information management and information system major is an interdisciplinary discipline that integrates management science and information technology. It requires students to master not only the basic knowledge of economic management, but also master the planning, design, and implementation using modern computer technology [2]. Due to the characteristics of the major itself, the information management can easily lead to unclear training objectives After graduation, if they are engaged in management work in related industry, they are not as good as management students on computer related majors [3]. According to market analysis and analysis, many companies urgently need a large number of professionals in information management. Therefore, the cultivation of craftsman-based talents in the information management specialty based on the competence standard is the guide for the teaching reform of the information management specialty [4].Scholars such as Wu Z W analyze the advantages and disadvantages of the unified theory and practice in the current educational model and suggested that talents give priority to students and attach importance to the cultivation of industrial (factory) vocational abilities as a guiding measure for the "factory" model of higher vocational automotive specialty [5].

In order to better meet needs of the development in information and sports industries, this paper focusing on the urgent need for Craftsman-type talents in the construction of an innovative country in China, the following characteristics in promoting innovative and entrepreneurship education with its unique advantages, and a craftsman-type talent cultivation model for information management and information systems is established.

2. Method

2.1. The "Learning Community" Model of Undergraduate Artisan Talents Training

The information management and information system major is based on some problems currently faced in the cultivation of applied talents, and explores a professional applied talent training model based on the "learning community" model. A "learning community" and core members of the "learning community" constitute a "professional teaching steering committee" that directly guides the revision and improvement of the training objectives, training plans, curriculum content, teaching methods and methods of the major. This model is based on a series of operation, guarantee and incentive mechanisms, and finally achieves the goal of continuous improvement of professional application talent training through a closed loop [6]. Among them, the professional instructor is the core and overall leader of the entire organization, refer to enterprise engineers with rich practical experience. The professional instructor directly guides each project team, and the student guidance team and company personnel give corresponding support, and is a professional decision-making and consulting agency that guides and supervises the cultivation of professional applied talents throughout the process [7].

2.2 Training Directions for Information Management and Information System Professionals

The majors of information management and information system in domestic universities are mostly vague, and some key universities have gradually formed their own unique school positioning characteristics in the long-term school running process. From the characteristics of information management and information system professional training in domestic universities, there are roughly the following choices:

1) Information system development direction: Represented by technology direction, such as Tsinghua University, Zhejiang University, Tongji University, Harbin Institute of Technology, Sun Yat-sen University, etc. These colleges are generally strong engineering schools with outstanding computer
skills. Students generally master at least one programming language. [8].

2) **Direction of financial information management**: Due to large demand for financial information management talents and the prosperity of China's financial industry. In recent years, some colleges and universities have formed the characteristics of talent training with financial information management. For example, the information management and information system majors of Xi'an Jiaotong University School of Economics and Finance and Southwestern University of Finance and Economics focus on financial information management.

### 2.3. Construction of Artisan Talent Training Model for Information Management and Information System Professional

1) **Integrate advantageous disciplines, and build distinctive professional positioning.** It is necessary to determine composite talent training goals based on their own school level, school characteristics, school positioning, and social actual needs. Strive to train talents with a deep management theory foundation and solid information technology skills to meet the actual needs of society [9].

2) **Optimize the curriculum system and form a characteristic curriculum group.** The information management and information system major should have its own knowledge architecture and curriculum architecture. Therefore, students should not only be required to master basic knowledge in management, information technology, etc., and understand various business processes of the enterprise, but also to enable students to master how to turn management problems into various types of information [10].

3) **Strengthen the design of practical teaching system and improve students' comprehensive ability.** In terms of course practice, students are required to master the practical skills set in the knowledge points of this course, such as trying to develop various small ERP system software. Students are allowed to directly participate in the research and development of the information system of the internship base or participate in scientific research projects hosted by teachers to further improve students' ability to analyze and solve problems in actual combat [11].

4) **Strengthen the training of teachers' quality and improve the construction of teachers.** All universities should further expand the channels for talent introduction, and introduce a large number of professionals with different discipline backgrounds in accordance with the actual situation, so as to ensure that the disciplines are crossed and their advantages are complementary. Bold and innovative, hiring advanced projects from the IT sports' industry [12].

### 3. Experiments

#### 3.1 Campus Survey Experiment

The school-enterprise cooperation internship training base is based on the training plan and needs of the university, and selects multiple large and medium-sized training project cases from the domestic and foreign businesses of the company for transformation, retaining key technical points, suitable for students to pass in March Teamwork to complete.

In the "learning community" model and its application in the training of undergraduate artisan-type talents, based on the "learning community", a "professional teaching steering committee" composed of discipline majors, curriculum experts, industry enterprise representatives, and administrative personnel is comprehensive Guide the cultivation of professional applied talents. Meanwhile, realize a major change in teaching and learning methods through the "learning community" model, and jointly learn theoretical knowledge and share practical experience to broaden the theoretical foundation and enhance students' practical ability and improving students' learning initiative. In addition, this model has certain application and promotion value, but in practice, how to improve the enthusiasm of enterprise participation, how to establish a more effective communication and coordination mechanism within the learning community, how to design a better student assessment method, etc. It is still worthy of further research and investigation is needed.
3.2 Specific Experimental Steps
1) School-enterprise jointly discuss talent training programs and jointly develop school-enterprise cooperation courses;
2) Carry out practical links such as professional cognitive internship, production internship, and upcoming graduation internship with enterprises;
3) Hire an engineer with rich experience in the enterprise to guide the practice of the industry;
4) Hire senior technical staff of enterprises to undertake part of the course, guide the course project practice and graduation thesis;
5) Send teachers to companies to study and practice through off-the-job or on-the-job methods to enrich the teachers' practical ability experience;
6) Construct a school-enterprise cooperative teaching team, organize teaching reform seminars, jointly declare scientific research topics, school-level key courses, jointly develop teaching materials, and jointly guide students' subject competitions;
7) Invite industry veterans to the school for relevant cutting-edge lectures

3.3 Market Research Experiment
In the data analysis, the cultivation of artisan talents is oriented to the market demand. School-enterprise cooperation can integrate the advantages of both companies and schools, and organically combine the talents, technologies, and experience of both parties. The cooperation can help schools understand the professional development trends and changes in industry positions in a timely manner, guide schools to scientifically and accurately position professionals, and adjust talent training programs. It has realized the "seamless connection" between schools and enterprises, making up for the shortcomings of school education resources, and is conducive to improving the quality of craftsman-type talents. To conduct a proper market research, we can divide into the following steps:
1) Accurately locate the market according to the industry and find several target markets
2) Find the market positioning of campus training personnel according to the campus training program
3) Exploring the market operation mode
4) Invite senior market practitioners to evaluate their work

4. Discussion
4.1 Analysis of Data of Environmental Adjustment of Artisan Talents
1) From the data surveyed in Table 1 and the realistic three-dimensional model in Figure 2, it can be seen that the difference between the data is not large, and most enterprises or schools have not done enough. Therefore, in order to create a good environment for the cultivation of artisan-type talents, schools and local governments should increase basic investment, build a number of university science and technology entrepreneurship parks, etc., and help college students to develop independent "double innovation" with a specialty as the core. Activities. Local governments should adopt supportive policies for college students' entrepreneurial innovation in terms of access and taxation, and encourage graduates to use their patented inventions or research results to start businesses, technology consulting companies. Institutions, social organizations, industry associations, and enterprises and institutions provide financial support for college students to start their own businesses. Specific investigations are shown in Table 1 and Figure 1.

| Table 1. Campus employment questionnaire |
|------------------------------------------|
| Investigative | Entrepreneurship | Factory | Private enterprise | State-owned enterprise |
|---------------|-----------------|---------|--------------------|-----------------------|
| 1             | 15              | 20      | 36                 | 25                    |
| 2             | 28              | 18      | 38                 | 11                    |
While facing the challenge of the learning community model, teachers and students of the information management major have jointly tried a more in-depth professional teaching steering committee training program. This program has played a higher strategic decision role in the cultivation of artisan talents. Using high-level, high-level professional-related talents as an example for undergraduate students, and also set a firm direction and future for the training of artisan-type talents. The data changed from the table is close to about 30, and the amount of data is relatively low, and the visual description of the specific histogram shows that there are key shortcomings in the artisan-type talent training model. It indicates that the practical curriculum system should pay attention to each practical link of professional cognitive internship, productive internship in the course, in-class practice, intensive practice and graduation practice. The results of our mapping in the market are shown in Table 2 and Figure 2.

| Investigation team | Local people | Domestic and foreign personnel | Mobile workers | Foreign personnel |
|--------------------|--------------|--------------------------------|----------------|------------------|
| 1                  | 28           | 21                             | 35             | 28               |
| 2                  | 27           | 24                             | 38             | 18               |
| 3                  | 19           | 29                             | 23             | 22               |

4.2. Analysis of the Characteristics of Artisan Talents
1) When it comes to artisan talent, it is difficult to define what character or personality is needed. But we can use statistics to try to understand some characteristics or common characteristics of craftsman talents with numbers. From the classification of several characters in the table and the figure, it can be seen that the cultivation of artisan-type talents is related to the personality of the person. Relatively speaking, among the artisan-type talents, the personality is stable and calm, and the personality is irritable. A small part. The details are shown in Table 3 and Figure 3.

| Investigation team | Chill | Irritable | Steadfast | Stable |
|--------------------|-------|-----------|-----------|--------|
|                    |       |           |           |        |
In addition, we think that personality is also one of the statistics worthy of artisan talents. For this, we conducted distributed statistics. From the different talent pools, the gender ratio of talents is calculated. From the charts and tables, we can see that the ratio of relative talents is relatively high, and the results show that there are more males than females in artisanal talents. The details are shown in Table 4.

Table 4. Gender survey of craftsmen

| Investigation team | Man | Female |
|--------------------|-----|--------|
| 1                  | 28  | 11     |
| 2                  | 17  | 24     |
| 3                  | 39  | 13     |

Figure 3. Personality distribution of craftsmen

5. Conclusions

In order to solve the contradiction between innovative and entrepreneurial talent supply and "Internet + sports" Industry demand on digital economy, to cultivate the "craftsman" spirit of innovative and entrepreneurial talents, it is necessary to cultivate the dedication of focusing on their own work. It is necessary to avoid the tendency to simply evaluate talents by titles and titles, and return to the nature of academics and honors, so that the majority of talents can always concentrate on their innovative and entrepreneurial ambitions. The practice link is an important link in the training of innovative and entrepreneurial applied talents, and it plays an irreplaceable role in the entire teaching system. Through practical teaching, it teaches students in a planned and organized way the operating skills and thinking methods of innovation and entrepreneurship education, and strengthens the analysis and design of students majoring in information management.

On the information and digital economy age, this article aims to study the craftsmanship talent training model and information management system. This article analyzes the basic connotation of craftsmanship talent education, analyzes the information management and information system specialty applied innovative and entrepreneurial talents training model, and builds an innovative country for high innovative and entrepreneurial level craftsmanship talents around China. Disciplinary interdisciplinary undergraduate programs, typified by information management and information systems, have their unique characteristics in promoting innovation and entrepreneurship education. By analyzing the current domestic training and education mode, and in view of the problems commonly encountered by colleges and universities in the training of artisanal talents, this article proposes a way to build a new model of innovative and entrepreneurial, "artisanal" talents training in information management and information system majors to change the traditional Teaching mode to improve teaching quality and enhance students' ingenuity and awareness. Experimental data show that the
craftsman-type talent training mode practice are conducive to the cultivation of talents and the storage of innovative and entrepreneurial talents, and can effectively increase the rate of success. The experimental data show that the craftsman-type talent training model and information management system have increased the talent reserve of universities by about 23%, and shortened the talent training cycle by about 15%, which has promoted the development of innovation and entrepreneurship science education in China.

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