Appraisal of Obvious Achievements and Hidden Values of School-Enterprise Cooperation Projects in vocational school

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Abstract: The transformation of sci & tech achievements is the manifestation of the value of sci & tech innovation in social and economic life. The ability to transform sci & tech achievements affects the comprehensive competitiveness of a country. It is necessary to start from the needs of universities and enterprises for their own development, and to establish a reasonable transformation mechanism for the results of college-enterprise cooperative under the new situation in terms of how to maximize the profits of the cooperation results. Analyze the specific situation of school-enterprise cooperation in the construction of vocational school training base from a value perspective, aiming to discover and build a reasonable value foundation, and give full play to the application of school-enterprise cooperation in the construction of vocational school training base.

Keywords: School-enterprise cooperation; obvious results; hidden value

1. Introduction

In the era of knowledge economy, sci & tech are the decisive factors for social development. The competitiveness of a country depends on its ability to transform and apply sci & tech [1]. Educational research results of universities are based on the use of different scientific research methods and creative intellectual processing by college teachers to produce knowledge products with academic value and value-added significance based on the educational phenomena and educational problems existing in the real society. However, the status quo of the transformation of sci & tech achievements in my country's universities is not ideal. In the process of transformation, there are also problems in policy guidance, supervision and management, evaluation and assessment, information inequity, and insufficient incentives [2]. Most of the scientific research work of university teachers is concentrated in universities, and it is difficult for them to access the market and enterprises. Therefore, their research results are often difficult to be directly used by enterprises. For production. Universities are important participants in technological innovation. Further improvement of the relevant transformation mechanism will drive two-way exchanges between scientific research and industry, stimulate scientific research enthusiasm of scientific researchers, guide the close integration of "industry" and "learning", and accelerate the economic development of society[3]. In this situation, only by strengthening cooperation with enterprises can university teachers ensure that their scientific research results can reach the market.

2. The status quo of the achievements of the college-enterprise cooperative project in vocational school

2.1. Scientific research results are seriously out of touch with the market

Enterprises believe that 68.5% of sci & tech achievements are immature, which is a very dangerous signal for vocational school, and it also shows the reason why the conversion rate of sci & tech achievements of vocational school is low. Most universities do not set up a department specifically responsible for the transformation of sci & tech achievements [4]. Even if they do, they mostly cooperate with other departments or regard the transformation work as a subsidiary function of a certain department, and the degree of specialization is not good. As a result, many excellent sci & tech achievements cannot be transformed into productivity, and the research and development of sci & tech projects lack market competitiveness. There are differences in the interest demands of universities and
enterprises: universities pay more attention to academic influence and public image, while enterprises pay most attention to market economy feedback. Different interest demands can easily cause miscommunication between the two parties.

The topic selection of sci & tech projects in vocational school is not closely integrated with the needs of enterprises [5]. This is mainly because it is difficult for vocational school to grasp the first-hand information of the needs of enterprises, which leads to the disconnection between sci & tech achievements and the needs of enterprises. The personnel flow mechanism between universities and enterprises is not flexible enough, which to a certain extent also hinders mutual understanding between schools and enterprises, and communication barriers are prone to appear. In the absence of an effective incentive mechanism, my country’s rewards for technical workers in universities are still focused on the spiritual level, and there is a lack of income distribution incentives for technology transformation and additional contribution rewards; the performance evaluation system of universities lacks flexibility, and the contribution ratio of sci & tech work in the evaluation is relatively large. Low, affecting the enthusiasm of sci & tech workers in universities. By strengthening cooperation with universities and introducing talents, technology and knowledge from universities, the long-term development of enterprises can be better promoted [6]. Even if the topic selection of sci & tech projects closely follows the needs of enterprises, they have not cooperated with enterprises and conducted sufficient feasibility investigations before the research, resulting in the inability to industrialize sci & tech achievements in time, and many valuable sci & tech achievements have been shelved, reducing the sci & tech achievements. Conversion rates. Relying on the enterprise carrier, the scientific research achievements of universities are tested by the market, and the value of sci & tech achievements is brought into play. Collecting market information can promote the further development of scientific research.

2.2. The management system is not sound

At present, the management system of vocational school has problems such as no separation of powers and imperfect systems. There are many shortcomings in the evaluation mechanism related to the transformation of sci & tech achievements in universities. It cannot fully affirm the subjects participating in the transformation work, and it is difficult to play the role of reasonable evaluation in promoting the transformation work. Lack of professional intellectual property management institutions: Currently, no university in my country has established professional management institutions similar to those of the United States, the United Kingdom, and Japan. Although the Tianjin Intellectual Property Exchange has been established and operated, it is still in the stage of exploration and development [7]. The relevant universities involved in the research have not yet unified and standardized the management and operation of the intellectual property rights of the sci & tech achievements of the universities, and the corresponding professional talent team is also lacking in construction. Due to the long-term formation of the sci & tech achievements management system of vocational school, the tendency to focus on sci & tech achievements awards and papers, and to underestimate the protection of intellectual property rights, makes the protection of sci & tech achievements in vocational school ineffective. Its function of "serving the society" through the transformation of results is not paid enough attention, and its scientific research strength is also measured based on the number of high-level papers published, the number of major scientific research projects applied for, and the number of high-level talents. From the analysis of existing approaches, it can be seen that the current establishment of relevant transformation institutions is mostly based on universities and lacks the industrialization orientation of enterprises and other market entities. The incomplete management system leads to the loss of talents. Since teachers are mainly involved in the transformation of sci & tech achievements, if vocational school do not provide them with a good development platform and good incentive mechanism, they will easily flow to enterprises [8]. Universities use incentive policies to link explicit indicators such as article items with the salary level of scientific research personnel and job promotion, but do not give objective and reasonable returns to the relevant personnel involved in the transformation of sci & tech achievements. This can easily lead to universities, colleges’ supervisors, and scientific researchers to some extent neglect the importance of “transformation of sci & tech achievements”. There are also fewer ways to establish contacts between colleges and enterprises. The lack of good division of labor and cooperation between colleges and enterprises makes it difficult to form some distinctive industrial clusters in university science parks to improve the overall competitiveness of the industry.
2.3. Insufficient scientific research funding

According to the experience of western developed countries, a mature technological achievement has been successfully applied to social production. The ratio of capital investment in research and development, pilot test, and achievement commercialization is generally 1:10:100. The sci & tech achievements of vocational school far below this ratio. In recent years, the total scientific research funding has increased year by year, but the proportion of scientific research funding to the total financial support has not increased. The specific manifestations are the insufficient total input of university funding, the single source of funding, and the small proportion of applied research funding [9]. The total funding of my country's institutions of higher learning has continued to grow for many years, and the growth rate has accelerated in recent years, but the total funding for scientific research is still insufficient. In terms of capital, the country is unable to shift to the transformation of sci & tech achievements on a large scale. Vocational school have many difficulties in financing, such as small policy support and excessive loan conditions required by banks. As a result, scientific research results are limited to theoretical research and the degree of industrialization is not high. High. A single source of funding is not only difficult to ensure sufficient funds, but also not conducive to the market mechanism's pull on scientific research transformation work, and it is also unable to disperse the risk of achievement transformation work. The funding for sci & tech in universities is mainly concentrated in domestic capital [10]. Government financial support and corporate project funding are the main sources. Financial capital, increasingly active venture capital, and private capital are used less. The funding for sci & tech in universities is mainly concentrated in domestic capital. Government financial support and corporate project funding are the main sources. Financial capital, increasingly active venture capital, and private capital are used less.

3. Countermeasures for perfecting college-enterprise cooperative projects in vocational school

3.1. Explore new ways of college-enterprise cooperative and form a new mechanism for college-enterprise cooperative

Universities and enterprises can conduct college-enterprise cooperative through cooperative development, joint establishment of technology centers, university teachers in-depth to enterprises to provide technical guidance, corporate researchers to universities for scientific research activities, and corporate funding to establish research institutions in universities [11]. The process of innovative education is a process of cultivating talents and improving quality. The application of scientific research results in innovation education can cultivate students' scientific concepts and innovative consciousness, and cultivate students' hard work and perseverance. Government departments, universities and research institutes, scientific researchers, enterprises, and intermediary agencies all have strong interest demands. In terms of realizing the transformation of high-efficiency sci & tech achievements, the interests of the five participating subjects are relatively consistent, and it is entirely possible to form a community of interests in a reasonable way to achieve a win-win situation. Figure 1 shows the generation process of the transformation system of sci & tech achievements in universities.

![Figure 1: The generation process of the transformation system of sci & tech achievements in universities](image)

The three functions of cultivating talents, scientific research and social service are the three functions of universities. Introducing scientific research projects into students' practical activities can fully exercise students' ability to analyze and solve problems, and improve their practical ability. In other words, it can transform scientific research results into curriculum resources and provide convenience for innovative education to open up new paths. Conducive to the real unity of scientific research and education. In particular, college-enterprise cooperative should strengthen the use of industry-university-research resources, actively explore effective operating mechanisms, optimize the
combination of talents and sci & tech resources, in-depth guidance of industry-university-research cooperation, and promote the common development of universities and enterprises [12]. The function of serving society as the third major function of universities began to develop and end. Cultivating talents and scientific research are the functional manifestations of university knowledge and talent innovation. The social service function requires universities to directly serve the society and promote social progress through a variety of channels, especially to promote the transformation of sci & tech achievements into actual productivity. The era is its important mission.

3.2. Give full play to government functions and promote college-enterprise cooperative

A good environment for industry-university-research cooperation needs government environmental elections and policy support to support these conditions. A reasonable and perfect management system is the guarantee condition for the public to solve the problem of the transformation of scientific and technological achievements in essence. To increase the conversion rate of scientific and technological achievements, it is necessary to establish a reasonable and complete management system. The goal of this mechanism is to strengthen the supervision and management of renovation work and the review of renovation projects, so as to find problems and remove obstacles as soon as possible. It is necessary to strengthen the standardized management of school-enterprise cooperation, implement scientific and technological financial support policies, and accelerate the transformation of scientific research results. If we can make good use of the existing scientific research results and effectively convert them into teaching resources, not only can we enrich our curriculum construction resources, but also promote the improvement of the quality and quantity of the curriculum.

The sci & tech management departments at all levels should set up special sci & tech achievements transformation supervision and management committees, which are responsible for supervising and managing various tasks in the transformation of sci & tech achievements. Turning scientific research results into curriculum resources can not only expand curriculum knowledge and enable students to receive more and more comprehensive knowledge, but also solve problems that may exist in real life. The mid-term review of the transformation process of sci & tech achievements should also formulate detailed standards. The process of transforming sci & tech achievements will encounter many difficulties and require a lot of resources and help. Students not only learned theoretical knowledge, skills and skills, but also learned scientific research methods, professional ethics and professionalism during the implementation of scientific research projects. As students’ ability to adapt to society is improved, their chances of success will increase. It is necessary to broaden new channels for the development of the sci & tech market, increase publicity, establish platforms such as a sci & tech achievement trading center, a technology contract arbitration center, and a patent agency service network, and improve the intermediary service system for the transformation of sci & tech achievements.

3.3. Give full play to the main role of enterprises in technological innovation

High-tech enterprises can form industrial clusters. These enterprises rely on knowledge and innovation as the foundation to export high-value-added products. They have strong industrial driving force and can quickly become the dominance of the regional economy. Although many universities have established scientific research departments, they are mainly responsible for the internal scientific research management of universities and are not responsible for the transformation of scientific research results. Therefore, an important reason for the low conversion rate of scientific research results in universities is the lack of specialized scientific research results conversion agencies and poor channels. In the rising industry, high-tech enterprises and universities promote each other's development in the process of knowledge and technology diffusion. The result recommendation process is shown in Figure 2.

The country’s current investment in technological research mainly depends on enterprises, and government funds play a guiding, supporting and encouraging role. The government should introduce corresponding policies, such as strengthening the protection of patents, intensifying the crackdown on counterfeiting and infringement, and revising the relevant provisions of the Patent Law; formulating incentive policies to guide enterprises to speed up product upgrades and improve product grades, technical content and added value etc. vocational school and enterprises must establish a mutual trust and win-win cooperation mechanism. The cooperation mechanism is the link between the school and enterprise to carry out cooperation. Both parties should reach a consensus on the distribution of interests and the protection of intellectual property rights, and carry out in-depth cooperation in order to
increase the conversion rate of sci & tech achievements. Make due contributions to the dual subjects.

![Achievement recommendation module](image)

**Figure 2: The result recommendation process**

4. Conclusions

The prerequisite for the establishment of a college-enterprise cooperative value community is government guidance and industry leadership. The foundation is that the partners of the cooperation must move from their own governance to value recognition. The key is to strengthen the construction of the cooperation platform. This requires the rational return of the members themselves, and the vocational school themselves. Efforts to promote the reconstruction of the cooperative body's value recognition system with education value as the core. In the future, the focus of the reform and innovation of university education is to strengthen the sustainable in-depth cooperation between universities and enterprises. The essential problem of college-enterprise cooperative is its value. The necessity and importance of college-enterprise cooperative should be analyzed from the value subject, value object and value relationship, and the value basis of college-enterprise cooperative should be studied. School-enterprise cooperation needs to elevate from the recognition of interest needs to the recognition of educational value. Universities have strong academic advantages and enterprises have strong production advantages. Through the combination of the two, it is conducive to the reasonable transformation of scientific research results of universities and the sustainable and stable development of the combination of production, education and research. Not only that, but also can effectively improve the independent innovation of enterprises. Ability to promote our country to become an innovative country faster.

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References

[3] Maican C, Lixandroiu R. A system architecture based on open source enterprise content management systems for supporting educational institutions


