

## Several Relations to Deal with in Deep Cooperation between Universities and Enterprises

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**Abstract.** There are cognitive differences in the goals, conditions, approaches, and methods of conventional cooperation between universities and enterprises, which lead to single contents of cooperation, inadequate cooperation relations and inadequate cooperation guarantees. The implementation of deep cooperation between universities and enterprises needs to correctly understand and deal with various contradictions and relations. This work put forward key points, starting points and countermeasures of carrying out deep cooperation between universities and enterprises from eight aspects including demand docking, complementary resources, benefit-sharing, and maintenance of cooperative subject relations, thus building a deep-level, win-win, sharing and lasting cooperation relationship between universities and enterprises.

### 1. Introduction

Cooperation between universities and enterprises is an important way for colleges and universities to perform their functions and serve the society, and it is also an inherent need for innovation and development of colleges and universities. At present, all types and levels of colleges and universities in China carry out cooperation with enterprises to varying degrees, but most of the cooperation is based on the establishment of external training and the specific content of practical teaching, which is difficult to sustain. Through the search of China National Knowledge Infrastructure, it is found that at present, scholars are mostly interested in the content and mode of the cooperation between universities and enterprises, but lack the research on the relationship between universities and enterprises. How to guide universities and enterprises to build a win-win, sharing and lasting cooperative relationship is a subject that requires in-depth research.

Compared with traditional cooperation, deep cooperation between universities and enterprises mainly refers to the positive and mutually beneficial relationship between universities and enterprises, which not only emphasizes the "results", but also highlights the "process". Different from the traditional cooperation between universities and enterprises, deep cooperation has significant differences in the cooperation level, cooperation areas, cooperation modes and operating mechanisms. Correctly understanding and handling various relationships and contradictions is the key problem to be solved [1].

### 2. The Relationship between Talent Training in Colleges and Universities and the Employment Needs of Enterprises

One of the main purposes of deep cooperation between universities and enterprises is to educate people collaboratively. Therefore, universities and enterprises need to answer two questions: first, for whom to cultivate; second, how to cultivate. The answer to the first question is that talents are cultivated for cooperative enterprises and industries. Given that colleges and universities are the producers of talents, enterprises are the users of talents, and the talents cultivated by colleges and universities must ultimately be tested by enterprises, therefore, collaborative education is the prerequisite for talent cultivation.

In conventional cooperation, both sides have shortcomings. Colleges and universities consider themselves talents, experts and authorities and consider talent training as an internal matter. Therefore, when formulating a talent training plan, they pay less attention to the actual needs of

employers. However, in the process of cooperation, enterprises often lack selective functions. They hope that colleges and universities can train qualified talents for themselves, but are unwilling to participate in the process of personnel training, thus transferring the full responsibility of personnel training to colleges and universities. As a result, the effectiveness of the cultivation mechanism is not significant.

In the process of deep cooperation between universities and enterprises, talents cultivated in universities should meet the needs of enterprises, and universities and enterprises should work together. For one thing, universities should respond to the diversified talent needs of enterprises, classify them, and design talent training programs scientifically; for another, the cooperative enterprise should provide relevant colleges and universities with employment standards, and co-construct the curriculum system and teaching content with the colleges and universities. Only when both sides jointly participate in talent training can a scientific and reasonable talent training plan be formulated. In the process of deep cooperation between universities and enterprises, it is a practice to pursue trifles but neglect essentials when talking about talent training without both sides.

### **3. The Relationship of Complementary Resources**

The premise of cooperation between universities and enterprises is the resource advantages of both sides. For example, colleges and universities have significant advantages in scientific research, technological innovation, talent training and management consulting, while enterprises have unique advantages in terms of the transformation of technical achievements and employment internships. In the process of deep cooperation between universities and enterprises, both parties should fully realize that the nature of cooperation is a resource exchange. Colleges and universities strive to convert enterprise resources into educational resources, and enterprises can convert college resources into production resources. Implementing resource sharing is beneficial to promoting knowledge exchange between universities and enterprises, technology exchange between universities and industries, and cultural exchange between universities and universities. In the process of resource exchange, the exchange is the premise, and value enhancement is the purpose [2].

How to complement each other's resource advantages? First, both universities and enterprises should jointly list the resource list, which can accurately grasp their respective resource advantages; second, they should explore the establishment of a long-term mechanism for resource sharing, integration, and use to achieve the exchange and two-way flow of resources. Obviously, through the mutual sharing of resources between the two sides, both universities and enterprises can obtain new resources to promote their own development and play the effect of "1 + 1 > 2" [3].

### **4. The Relationship between Respective Interests and Common Development**

The main body of cooperation between universities and enterprises involves enterprises (industries), students and universities, which should follow the principle of balancing the interests of stakeholders. In the process of deep cooperation between universities and enterprises, the value manifestation and interest pursuit are different due to the different positions of the different parties. However, values and interests are the bonds and promoters that ensure the healthy operation of cooperation, which is also the driving force of cooperation [4]. For colleges and universities, its value lies in cultivating high-skilled application-oriented talents, reducing investment in talent training and teacher construction, and improving the quality of running schools. For enterprises, its value lies in the advancement of outstanding talents, control of human resources costs, and enhancement of core competitiveness. Therefore, in the implementation of the deep cooperation between universities and enterprises, both parties need to face each other's interests. Talking about cooperation without discussing interests is to "draw water from a bamboo basket", which means they cannot succeed finally.

The key for universities and enterprises to dancing the "duet dance" well is to choose the right entry point, and the establishment of long-term benefit-sharing mechanisms is the priority. First,

while paying attention to their own development, they should understand the interests of each party and meet them, so as to achieve a win-win situation; second, the results of cooperation at different stages of cooperation should be allocated fairly and appropriately to achieve impartiality.

## **5. The Relationship between Scientific Research in Colleges and Universities and the Technical Product Upgrade in Enterprises**

At the end of the 20th century, the contribution rate of science and technology to economic growth in medium-developed countries was about 50%, and that in western developed countries was about 70-80%. During the same period, the contribution rate of science and technology to economic growth in China was only 20% -30%, which was lower than that in medium-developed countries. Studies found that the low conversion rate of scientific and technological achievements is the main reason for the low contribution rate of science and technology to economic growth in China [5]. Colleges and universities, especially high-level science and technology universities, rely on strong scientific research capabilities to generate tens of thousands of new achievements and new technologies, so they are the main positions for the production of scientific and technological achievements in China.

At present, colleges and universities lack effective cooperation mechanisms between the transformation of technological achievements and the production of enterprises. Since colleges and universities are teaching and research institutions, they have obvious shortcomings in the transformation of technological achievements. For enterprises, although they are good at production and marketing and have financial support, they lack technical innovation support, which makes it difficult to transform and upgrade. The shortcomings of both sides are not only a contradiction, but also provide opportunities for the deep cooperation between universities and enterprises to solve technical needs and supply [6].

In the process of deep cooperation, colleges and universities should use the advantages of technological resources such as product development and technological innovation to solve the problems existing in corporate technological innovation and product research and development, and increase the key technical research on enterprise product upgrades, thus providing technical support and services for the production and operation of cooperative enterprises and giving full play to the functions of scientific research and social service of colleges and universities; enterprises also need to change production and management concepts, actively adapt to regional economic transformation and development, and positively entrust colleges and universities to carry out technological innovation and product research and development, so as to use new technologies and new products to lead the sustainable development.

Relationship between the Two Partners and the Industry Association

The industry association is a non-profit organization, which is created with the development of enterprises and has an inherent natural connection with enterprises. It is responsible for providing consultation, communication, coordination, supervision and services for the development of enterprises and industries. It is the industry representative and the "intermediary" connecting universities and enterprises in deep cooperation.

The deep cooperation model should be continuously and effectively developed, and the industry association, as a third-party platform, should participate in the entire process of cooperation and play its due role. First, cooperative enterprises can learn about the latest technology and products in the industry through industry associations, so as to make up for the shortcomings of inadequate market regulation. Second, since members of industry associations are mostly industry experts, they are familiar with the demand for talents in the industry, and they have a precise grasp of talent training standards, capabilities and market needs. Therefore, colleges and universities should utilize the resources of industry associations to focus on talent training, and make the professional layout of regional, industrial, industrial development needs according to the "baton" of market demand. Third, industry associations are usually the main formulator of the trade and professional qualification standards, so it should take the initiative to participate in the cooperation process, give full play to its standard functions, guide and regulate the behaviors of all parties in the deep

cooperation process. Finally, as a third-party institution, the industry association should participate in coordinating and handling the problems and disputes, and assume the responsibility of "peacemaker" if necessary.

## **6. The Relationship between the Two Partners and the Local Government**

The cooperation between universities and enterprises requires the government to play a dual role. For one thing, the government should act as a "matchmaker" for the cooperation projects and create the perfect environment for the cooperation between universities and enterprises; for another, the government should act as "parent" to guide and regulate the cooperation.

Specifically, the government should speed up the formulation and improvement of education policies and regulations, escort the deep cooperation between universities and enterprises, and create good policy and institutional environment. What is more, the government should give full play to its own management and regulatory functions to coordinate the resources of universities and enterprises reasonably, and comprehensively guide the development of the cooperation. At the same time, the government should actively learn from the management experience of foreign cooperation between universities and enterprises, formulate incentives that promote the deep cooperation between schools and enterprises, mobilize the enthusiasm of all parties, and promote the healthy cooperation to go further.

## **7. The Relationship between University Culture and Enterprise Culture**

Although the value orientation of universities and enterprises is different, it does not affect the further promotion of their cooperation. The foundation of deep cooperation is resource sharing, and the goal of the cooperation is mutual benefit and win-win. In the process of cooperation, the two sides should make full use of resources such as talents and technologies to form intersection factors, respect each other's cultural concepts, and establish a long-term cultural integration mechanism. For example, colleges and universities should learn the innovative consciousness and competitive spirit in the enterprise culture, and make it become an important part of the university spirit; enterprises can learn the institutional culture, service culture, and humanistic spirit from colleges and universities to deepen the connotation of enterprise culture.

In the process of deep cooperation between universities and enterprises, only when the two parties realize cultural exchanges, interactions, and organic integration can they recognize and respect each other's values. When encountering contradictions or obstacles, the two sides can think and solve problems from the perspective of each other and promote the continuous operation of cooperation. Therefore, the interaction, exchange, penetration and organic integration between the two parties in the cultural field are not only the needs of their own development, but also the inherent needs of the deep cooperation.

## **8. The Relationship between Alumni and the Deep Cooperation**

The most abundant talent resources in universities are alumni resources, which are distributed at home and abroad, covering all walks of life. Many of them are elites, and most of them are more enthusiastic about the construction and development of their alma mater. The scientific and rational use of alumni resources is one of the driving forces for colleges and universities to carry out deep cooperation.

Although colleges and universities attach great importance to alumni resources, their understanding of alumni resources remains at a shallow level such as "image resources and financial resources", but ignores "educational resources, teaching resources, information resources, intellectual resources, and industrial resources" of alumni as well as their function in the collaborative education. The deep cooperation between universities and enterprises emphasizes the reasonable excavation and utilization of alumni resources. Colleges and universities should gather the alumni resources as a platform advantage and actively play the function of intermediary and

bridge, thus bringing universities into contact with enterprises, mobilizing the interest and enthusiasm of enterprises to participate in cooperation, and maximizing the benefits of alumni resources [7].

## 9. Summary

The relationship between universities and enterprises is innate. Under the background of building China into a country with strong human resources, deep cooperation, collaborative education and collaborative innovation have become important indicators to measure the quality of colleges and universities, as well as the inevitable trend of educational reform and innovation in local ordinary undergraduate colleges, especially in higher vocational colleges. Therefore, correctly understanding and handling the various relationships faced by the deep cooperation between universities and enterprises is the prerequisite and foundation to obtain new development resources and development opportunities.

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