

# ***Research on the path of local university education reform under the background of the integration of industry and education***

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**Abstract:** The strategy of integrating industry and education is the guiding principle for the reform and development of higher education in the new era, the advanced stage of school-enterprise cooperation, and the only way to promote the transformation of local universities to application. This paper expounds the connotation of the fusion strategy and the leading role of higher education, put forward the local universities implement production and education integration strategy to focus on three combination, focus on three enhancement, from the construction of applied university education evaluation system, establish to discipline and professional operation system, accelerate the course teaching content and teaching method reform of three aspects put forward the local college education reform path.

## **1. Introduction**

The strategy of integrating industry and education is the guiding principle for the reform and development of higher education in the new era, the advanced stage of school-enterprise cooperation, and the only way to promote the transformation of local colleges and universities into application. Through the integration of industry and education, local colleges and universities can train high-quality talents in line with the market demand, improve the quality of talent training, promote scientific and technological innovation and industrial development, and promote the development of colleges and universities themselves[1]. However, in the process of implementing the integration of industry and education, local colleges and universities are faced with many challenges and problems, such as insufficient policy support, and the mismatch between education supply and the structural demand of local industries. Therefore, the research on the path of local university education reform under the background of the integration of industry and education has important practical significance.

## **2. The Connotation and Leading Role of the Integration of Industry and Education**

The integration of industry and education is an education mode that deeply integrates industry

and education. It aims to promote the reform of talent training mode, improve the quality of talent training, and promote scientific and technological innovation and industrial development through the in-depth cooperation between universities and enterprises, industries and industries. The integration of industry and education is not only in line with the needs of economic development, but also is an important direction of higher education reform.

The connotation of the industry-education integration strategy mainly includes the following aspects[2]: first, the integrated development of industry and education, namely, to realize resource sharing and complementary advantages through the combination of industry and education; the market-oriented talent training mode reform, that is, adjust the specialty setting and curriculum structure according to the market demand and train high-quality talents that meet the market demand; the third, scientific and technological innovation and industrial development, namely, by transforming the scientific research achievements of universities into the productive forces of enterprises, promote the scientific and technological innovation and industrial development.

The primary role of the integration strategy between industry and education in higher education is primarily reflected in several key aspects: First, it facilitates the transformation of local universities into application-oriented institutions. By integrating production with education, these universities can align more closely with local economic and social development needs, thereby cultivating applied talents that meet market demands. Second, it enhances the quality of talent training. Through this integration, universities can collaborate closely with enterprises and industries to stay informed about the latest developments and technological requirements within their sectors. This allows for targeted adjustments in program offerings and teaching methodologies, ultimately improving both the applicability and competitiveness of their talent training initiatives. Third, it fosters scientific and technological innovation as well as industrial development. By merging academic research outcomes with enterprise production processes through this integration, universities can facilitate technology transfer and commercialization efforts that promote scientific advancement and industrial growth.

### **3. Local Universities to Implement the Integration of Industry and Education Path Selection**

When implementing the strategy of integrating industry and education, local colleges and universities need to focus on three combinations, focus on three enhancement, and explore the reform path from three aspects: constructing the education evaluation system of application-oriented colleges and universities, establishing the professional operation system guided by disciplines, and accelerating the reform of curriculum teaching content and teaching methods.

#### **3.1. Focus on 3 combinations**

##### **3.1.1. The Combination of Industry and Education**

The combination of industry and education is the core of the integration strategy of industry and education, and also the basis for the implementation of the integration strategy of industry and education. Local colleges and universities should actively cooperate with enterprises and industries, jointly formulate talent training programs, jointly carry out curriculum setting and teaching organization, strengthen practical teaching and innovation and entrepreneurship education, and improve students practical ability and innovation and entrepreneurship ability. At the same time, universities can also cooperate with enterprises to build practice and training bases and industry-university-research collaborative innovation centers to promote industry-university-research collaborative innovation, and jointly carry out scientific research projects and technological innovation activities.

### **3.1.2. Cross-integration of Disciplines**

Interdisciplinary integration is an important means for local universities to implement the integration strategy of industry and education. Local colleges and universities should break down the disciplinary barriers, promote the intersection and integration between different disciplines, and form a distinctive discipline and specialty system[3]. Through the integration of disciplines, interdisciplinary talents with interdisciplinary background and innovation ability can be cultivated to meet the needs of the society for diversified talents. At the same time, interdisciplinary integration can also promote the in-depth cooperation between universities and enterprises, jointly carry out cutting-edge technology research, and promote scientific and technological innovation and industrial development.

### **3.1.3. Combination of Industry, University, Research and Application**

The combination of industry, university, research and application is an important way for local universities to implement the strategy of integrating industry and education. Local colleges and universities should strengthen the cooperation with local industries, enterprises and scientific research institutions to promote the integrated development of industry, university, research and application. Through the combination of industry, university, research and application, the scientific research achievements of universities can be transformed into the productive forces of enterprises, and scientific and technological innovation and industrial development can be promoted[4]. At the same time, the combination of industry, university, research and application can also provide more practical teaching bases and research platforms for universities, and help teachers to better carry out practical teaching and research work.

## **3.2. Focus on the Three Enhancement**

### **3.2.1. Strengthen the Practical Teaching Links**

Practical teaching is an important link in cultivating application-oriented talents. Local colleges and universities should strengthen practical teaching links and improve students practical ability and innovation and entrepreneurship ability. On the one hand, colleges and universities can cooperate with enterprises to build more practice training base to provide students; on the other hand, colleges and universities can also strengthen the practice teaching links, such as experimental teaching, course design and graduation design, to improve students practical ability and comprehensive quality.

### **3.2.2. Enhance the Practical Ability and Innovative Spirit of the Teachers**

The practical ability and innovative spirit of teachers are important guarantees for cultivating application-oriented talents. Local colleges and universities should strengthen the construction of teachers and cultivate a teacher team with practical ability and innovative spirit[5]. On the one hand, universities can improve the overall quality of teachers by introducing high-level talents and strengthening teacher training; on the other hand, universities can encourage teachers to actively participate in scientific research and social service activities to improve their practical ability and innovative spirit.

### **3.2.3. We will Enhance our Ability to Serve the Society**

Serving the society is one of the important missions of local universities. Local colleges and universities should enhance their ability to serve the society and make contributions to the local

economic and social development. On the one hand, colleges and universities can cooperate with enterprises in technical consultation and technology transfer to promote the upgrading and development of local industries; on the other hand, they can also actively participate in local social construction and service activities, such as technology poverty alleviation and cultural popularization, to improve the social influence and reputation of colleges and universities.

### **3.3. Building an Educational Evaluation System for Application-oriented Universities**

Building the education evaluation system of application-oriented universities is an important guarantee for local universities to implement the strategy of integrating industry and education. The education evaluation system of application-oriented colleges should be oriented by market demand and pay attention to cultivating students practical ability and innovation and entrepreneurship ability. Specifically, the education evaluation system of applied universities should include the following aspects.

#### **3.3.1. Evaluation of Talent Training Quality**

The evaluation of talent training quality is the core of the education evaluation system in application-oriented universities. Local colleges and universities should establish a scientific and reasonable evaluation mechanism for the quality of talent training, and make a comprehensive evaluation of students learning achievements, practical ability and innovation and entrepreneurship ability[6]. At the same time, colleges and universities should also strengthen the follow-up investigation and feedback analysis of graduates, understand the employment situation and career development of graduates, and provide a basis for the continuous improvement of the quality of talent training.

#### **3.3.2. Evaluation of Practical Teaching Quality**

The evaluation of practical teaching quality is an important part of the education evaluation system of applied universities. Local colleges and universities should establish an evaluation mechanism of practical teaching quality to comprehensively evaluate the teaching quality of practical teaching link. At the same time, colleges and universities should also strengthen the management and supervision of practical teaching to ensure the smooth development and effective implementation of practical teaching.

#### **3.3.3. Evaluation of the Teaching Staff Construction**

The evaluation of teaching staff construction is an important guarantee for the education evaluation system of application-oriented universities. Local colleges and universities should establish an evaluation mechanism for the construction of teachers, and comprehensively evaluate their practical ability, innovative spirit and social service ability[7]. At the same time, colleges and universities should also strengthen the training and management of teachers, and improve the overall quality and level of teachers.

### **3.4. Establish a Professional Operation System under the Leadership of Disciplines**

The establishment of a professional operation system is an important measure for local universities to implement the strategy of integrating industry and education. Specifically, the local colleges and universities should adjust the specialty setting and curriculum structure according to the market demand and the industry development trend, so as to form a distinctive discipline system.

At the same time, colleges and universities should also strengthen the integration of disciplines and the combination of industry, university, research and application to promote the coordinated development between disciplines and majors.

#### **3.4.1. Adjust the Professional Setting and Curriculum Structure**

Local colleges and universities should adjust the specialty setting and curriculum structure according to the market demand and the industry development trend. On the one hand, universities can add professional directions closely related to local industries to cultivate high-quality talents that meet the market demand; on the other hand, universities can optimize the curriculum and teaching content to improve the students comprehensive quality and employment competitiveness.

#### **3.4.2. Strengthen Interdisciplinary Integration**

Local colleges and universities should strengthen the interdisciplinary integration of disciplines to form a distinctive discipline system. On the one hand, universities can break down disciplinary barriers and promote the integration of different disciplines; on the other hand, universities can strengthen cooperation with enterprises and research institutions to jointly conduct frontier technology research and promote the development of interdisciplinary integration.

#### **3.4.3. Promote the Integration of Industry, University, Research Institutes and Application**

Local colleges and universities should promote the combination of industry, university, research and application, and promote the coordinated development between disciplines and majors. On the one hand, universities can cooperate with enterprises to carry out scientific research projects and technological innovation activities[2]; on the other hand, universities can actively participate in the upgrading and development of local industries and contribute to the local economic and social development.

### **3.5. Accelerate the Reform of Curriculum Teaching Content and Teaching Methods**

Accelerating the reform of curriculum teaching content and teaching methods is an important means for local colleges and universities to implement the strategy of integrating industry and education. Local colleges and universities should adjust the teaching content and methods according to the market demand and improve the teaching quality and effect of the course.

#### **3.5.1. Adjust the Course Teaching Content**

Local colleges and universities should adjust the course teaching content according to the market demand and the industry development trend. On the one hand, universities can introduce industry standards and advanced technology to update the teaching content; on the other hand, universities can strengthen practical teaching to improve students practical ability and innovation and entrepreneurship ability.

#### **3.5.2. Reform Teaching Methods**

Local colleges and universities should reform their teaching methods to improve the teaching quality and effect of the curriculum. On the one hand, colleges and universities can adopt heuristic teaching and case teaching to stimulate students learning interest and initiative; on the other hand, universities can strengthen the application of new teaching modes such as online teaching and mixed teaching to improve the teaching effect and learning efficiency.

### **3.5.3. Strengthen the Practical Teaching Links**

Local colleges and universities should strengthen practical teaching links and improve students practical ability and innovation and entrepreneurship ability. On the one hand, colleges and universities can cooperate with enterprises to build practice bases and industry-university-research collaborative innovation center; on the other hand, colleges and universities can strengthen the management and supervision of practical teaching to ensure the smooth and effective implementation of practice teaching.

## **4. Case Analysis**

This paper takes a local university as an example to analyzes the implementation path and effect of the integration strategy of industry and education. The school actively cooperates with enterprises and industries to jointly formulate talent training programs, jointly carry out curriculum setting and teaching organization, and strengthen practical teaching and innovation and entrepreneurship education. At the same time, the university has also strengthened cooperation with local industries, enterprises and scientific research institutions to promote the integrated development of industry, university, research and application[8].

### **4.1. The Practice of Combining Production and Education**

The school actively cooperates with enterprises to jointly develop talent training programs. Through the in-depth cooperation with enterprises, the school has understood the latest developments and technical needs of the industry, and has adjusted the professional Settings and teaching methods accordingly[6]. At the same time, the school also cooperates with enterprises to build a practice and training base and an industry-university-research collaborative innovation center to strengthen practical teaching and innovation and entrepreneurship education. Through the practice of combining industry and education, the quality of talent training in the school has been significantly improved, and the students practical ability and innovation and entrepreneurship ability have been effectively improved.

### **4.2. The Practice of Interdisciplinary Integration**

The school actively breaks down disciplinary barriers and promotes the integration of different disciplines. Through the practice of interdisciplinary integration, the university has formed a distinctive discipline and professional system, and cultivated a group of interdisciplinary talents with interdisciplinary background and innovation ability. At the same time, the university has also strengthened the cooperation with enterprises and scientific research institutions, jointly carry out cutting-edge technology research, and promoted the development of interdisciplinary integration.

### **4.3. The Practice of Combining Industry, University, Research and Application**

The university actively cooperates with local industries, enterprises and scientific research institutions to promote the integrated development of industry, university, research and application. Through the practice of combining industry, university, research and application, the university has transformed its scientific research achievements into the productive forces of enterprises, and promoted scientific and technological innovation and industrial development. At the same time, the school also actively participates in the upgrading and development of local industries, making contributions to the local economic and social development.



## 5. Conclusions and Outlook

The strategy of integrating industry and education is an important direction of the reform and development of higher education in the new era, and also an important way for local colleges and universities to implement the education reform. Local colleges and universities should actively cooperate with enterprises and industries, jointly formulate talent training programs, and strengthen practical teaching and innovation and entrepreneurship education[1]. At the same time, local universities should also strengthen the cooperation with local industries, enterprises and scientific research institutions to promote the integrated development of industry, university, research and application. Through the implementation of the strategy of integrating industry and education, local universities can improve the quality of talent training, promote scientific and technological innovation and industrial development, and promote the development of universities themselves.

In the future, local universities should continue to deepen the implementation of the strategy of industry-education integration, strengthen the in-depth cooperation with enterprises and industries, and promote the reform of talent training mode and scientific and technological innovation. At the same time, local colleges and universities should also actively explore new modes and paths of industry and education integration, so as to make greater contributions to the local economic and social development.

In the process of industry and education integration, local colleges and universities are still facing many challenges and problems, such as insufficient policy support, education supply and the structural demand of local industries. Therefore, the government should increase the policy support for the integration of industry and education in local universities, and provide a broader development space and a more favorable policy environment. At the same time, local colleges and universities should also strengthen their own construction, improve the quality of talent training and scientific research level, and provide for the in-depth implementation of the integration strategy of industry and education.

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