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Research on the Integration of Industry and Education in Higher Vocational Education

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Abstract: ***The game between the interest subjects of the integration of industry and education in higher vocational colleges refers to the process that the interest subjects contribute to their own behavior according to their own information and ability cognition under certain institutional conditions. The problems in the game of "upgrading", deviation of the government; the problems of dislocation, free riding game and "being idealized"; the lack of function, bad competition and monopoly. Based on this, we should be students-oriented, improve the student interests protection system; pay attention to the actual needs, explore diversified integration of industry and education; optimize the multiple governance path, better play the function of industry organization.***

Keywords: Higher vocational colleges, Integration of industry and education, Interest subject, Game**.**

1. Introduction

The integration of education and production, and the fusion of industry and education are important characteristics and requirements of vocational education, and are also the focus of China's vocational education policy. The 1991 "Decision on Vigorously Developing Vocational and Technical Education" pointed out that all types of vocational schools and training centers should "advocate the integration of industry and education, and the integration of work and study". In 2014, the "Decision of the State Council on Accelerating the Development of Modern Vocational Education" proposed "establishing a sound system of industry-education integration". According to statistics, as of 2021, there are as many as 171 normative documents on the integration of industry and education in vocational education. [1]. Article 4 of the newly revised "Vocational Education Law of the People's Republic of China" in 2022 points out that vocational education should "adhere to the integration of industry and education, and school-enterprise cooperation". In 2023, the National Development and Reform Commission, the Ministry of Education, the Ministry of Human Resources and Social Security and other 8 departments jointly issued the "Implementation Plan for the Empowerment and Enhancement Action of Industry-Education Integration in Vocational Education (2023-2025)", proposing "to coordinate the coordinated development of education and industry, innovatively build a platform for industry-education integration, continue to promote the pilot construction of industry-education integration, improve and implement a combined incentive empowerment policy system, and further deepen the integration of industry and education". The continuous accumulation of policies reflects the government's attention and support for the integration of industry and education, but it also reflects that there is still a certain distance between the integration of industry and education and the expected goals. This article intends to analyze the conflicts of interest and development difficulties of the integration of industry and education in higher vocational education from the perspective of stakeholder game, and on this basis propose corresponding optimization countermeasures.

2. Analysis of Stakeholders in the Integration of Industry and Education in Higher Vocational Education

In 1963, a research team at Stanford University proposed the concept of stakeholders, arguing that in addition to shareholders, there are other important stakeholders that are related to the survival and development of enterprises. In 1984, the famous economist Freeman explained the application of stakeholder theory to decision management in his book "Decision Management: Stakeholder Approach". Freeman pointed out that traditional economic theory emphasizes competition, while stakeholder theory emphasizes cooperation; traditional economic theory emphasizes the maximization of economic benefits, while stakeholder theory emphasizes the balance of interests: traditional economic theory adopts the "economic man" hypothesis, while stakeholder theory adopts the complex man hypothesis [2]. It can be seen that the core of stakeholder theory is to regard decision management as social relationship management and to regard the construction of good and lasting stakeholder relationships as the basis for enterprises to create value. The game of stakeholders in the integration of industry and education in higher vocational education mainly refers to the process in which, under certain institutional conditions, stakeholders interact with each other based on the information and ability they have mastered and make decisions that are beneficial to themselves. In the field of industry-education integration research, some scholars have adopted the theoretical framework of stakeholders to analyze the optimization mechanism and path of industry-education integration: some scholars believe that the core stakeholders are vocational schools and enterprises, the general stakeholders are the government and industry associations, and other stakeholders are students' parents and the general public, etc. [3]; some studies have classified education management departments, financial departments, human resources and social security departments, provincial and municipal people's governments, etc. as authoritative stakeholders, higher vocational colleges and enterprises as core stakeholders, industry organizations as close stakeholders, and students' parents, alumni, the general public, etc. as marginal stakeholders [4]; some scholars believe that the core stakeholders are enterprises and applied universities

directly involved in industry-education integration, indirect stakeholders are government departments and industry associations, potential stakeholders mainly refer to other enterprises and universities, and marginal stakeholders are parents, the media and the general public, etc. [5].

In summary, the government, enterprises, schools and industry organizations are important stakeholders in the integration of industry and education, and they have their own interests. The government hopes to maximize political value, act as a guide and motivator for the integration of industry and education, and achieve a win-win situation for all parties; enterprises hope to recruit outstanding graduates to help them overcome technical difficulties and increase economic benefits; schools hope to improve the quality of talent training by improving courses, majors and teaching conditions; industry organizations hope to strengthen the talent team, enhance scientific and technological strength, and increase social influence. But the question is whether students are stakeholders in the integration of industry and education. What is the significance and value of the integration of industry and education without the participation of students? Will the interests of the government, enterprises, schools and industry organizations proposed by some researchers be distorted and "virtualized" due to game? Do only enterprises need economic benefits, but schools do not? Is there also game among stakeholders, that is, between government departments, between schools, between enterprises and between industry organizations? Is there competition and conflict between large and small enterprises, different industry organizations, and between "double high plan" colleges and universities in different regions and non-"double high plan" colleges and universities?

3. Analysis of the Game Problem of Industry-education Integration in Higher Vocational Education

3.1 Game Issues in Higher Vocational Colleges

3.1.1 The game between students' "junior college to undergraduate" and industry-education integration

At present, the number of students taking the "junior college to undergraduate" examination for higher vocational colleges is increasing year by year, which poses a huge challenge to students' participation in enterprise training and the promotion of industry-education integration. In 2022, the proportion of "junior college to undergraduate" graduates in vocational colleges nationwide has reached 20%, among which the provinces and cities with the highest admission rates are: Shaanxi Province 74.6%, Chongqing City 69.77%, Liaoning Province 67.36%, Beijing 66.73%, Gansu Province 61.45% [6]. In addition, the correlation between the content of the "junior college to undergraduate" examination and industry-education integration in most provinces is not strong. At the same time, the time for higher vocational students to take the "junior college to undergraduate" examination and on-the-job internship (according to the latest internship management regulations of vocational colleges of the Ministry of Education) is concentrated in the third year. There is a time conflict between the two, which often leads to students falling into a situation of losing sight of one while focusing on the other, resulting in the problem of internship becoming a formality.

Why do students choose the "junior college to bachelor's degree" exam that has little to do with the integration of industry and education, but are not willing to choose to participate in internships in companies that integrate industry and education? An important reason is that the economic income and social status of graduates from ordinary undergraduate colleges and universities are higher than those of junior college graduates from higher vocational colleges. Statistics from the National Bureau of Statistics show that the average monthly income of undergraduate and vocational graduates in 2022 is 5,990 yuan and 4,595 yuan respectively. There is a large gap between the two [7]. The returns that students can get from their human and economic investment in "conservatory to bachelor's degree" are higher than the returns from participating in corporate internships through the integration of industry and education. There are also some local governments that stipulate that only graduates with a bachelor's degree or above can enjoy preferential talent policies in settling down and purchasing a house, etc., which to a certain extent strengthens students' willingness to take the "junior college to bachelor's degree" exam. In addition, most industry-education integration projects only regard governments, schools, industries and enterprises as important stakeholders, and pay insufficient attention to students. Although industries, companies, and schools have common interests with students, there are also some conflicts of interest. For example, companies hope that intern students can work overtime during peak production and sales seasons, while schools hope that students can accept internship positions uniformly arranged by the school to facilitate management. These are in conflict with the interests of students' own development. At the same time, as individuals, there is a significant imbalance between students' information mastery and understanding of the integration of industry and education compared with other subjects, and they lack the necessary awareness and ability to protect their rights, making them more inclined to choose "junior college to bachelor's degree" which is more beneficial to their development. take an exam.

3.1.2 Top-down policy requirements

There are two main reasons why schools participate in industry-education integration. First, it is to better promote the all-round development of students, meet the demand for talent in industrial development, and serve local economic development. However, the problem is that educational and teaching activities are long-term, ambiguous, and complex, and it is difficult to attribute the improvement of results entirely to the effect of changes in a certain link. Industry-education integration is certainly an important factor in promoting the all-round development of students, industrial development, and local economic development, but it is not the only important factor. Second, it is the need for schools to meet the assessment requirements of superiors. The development of industry-education integration in China has long relied on top-down promotion. The reason why higher vocational colleges are keen on industry-education integration is mainly to meet the rigid requirements of policies, rather than out of the actual need to solve vocational education problems. As some scholars have pointed out,

industry-education integration that caters to policy needs will replace the need to serve regional economic development [1]. "Higher vocational colleges are mainly managed and operated by the government and are responsible to the government. School managers are more concerned with obtaining government recognition and support, rather than directly facing the market and meeting the needs of enterprises [8]." With such passive coping, it is difficult for industry-education integration to develop creatively. As the recipients of policies, higher vocational colleges are usually only responsible for policy implementation and meeting policy requirements in one dimension, which makes it impossible for some innovative initiatives of integrating industry and education to find corresponding basis in existing policies, and thus they are denied and questioned.

3.1.3 School goals shift

Schools, enterprises and governments have different organizational logics and interests. The government focuses on social benefits, enterprises focus on economic benefits, and schools focus on cultural benefits [9]. However, no matter what kind of subject, it is necessary to consider economic benefits, clarify the relationship between input and output, and grasp the performance between cost and benefit. On the surface, some schools carry out industry-education integration and school-enterprise cooperation regardless of cost, resulting in the income of the relevant projects themselves being insufficient to offset the investment costs. In the view of some managers of higher vocational colleges, although industry-education integration projects may not necessarily bring economic benefits, once they are recognized and supported by the higher authorities, they will bring other benefits far greater than the industry-education integration projects. The problem is that such benefits benefit from the government's strong support and investment in a short period of time, which is inconsistent with the original expected goals of industry-education integration. Once the support cannot be sustained, serious consequences will occur. The deep integration of industry and education involves factors such as "dual teacher" training, curriculum reform, scientific research on industry needs, and sufficient demonstration of talent training goals. Compared with the traditional governance model of higher vocational colleges, it requires more costs. “In order to obtain government financial support or cope with government inspections and assessments, some higher vocational colleges have shown a lot of ‘flashy but unrealistic’ and ‘policy above and countermeasures below’ phenomena in the construction of ‘dual-qualified’ teams, reform of internship and training courses, and school-enterprise cooperation [10].”

3.2 Government Gambling

3.2.1 Insufficient coordination among government departments

In terms of the policy system, China's industry-education integration policy has formed a policy chain consisting of "the State Council - the Ministry of Education (National Development and Reform Commission) - people's governments at all levels - education administrative departments at all levels - higher vocational colleges". At the national, provincial and municipal levels, the industry-education integration policy text needs to be jointly issued by multiple departments, but only higher vocational colleges are the entities that implement and execute the policy. Some scholars pointed out that "the policy document jointly issued by eight national departments proposed that industry-education integration enterprises can be registered, but in the actual application and registration process, no department finally said that it could undertake the "registration" work, resulting in the policy being unable to be implemented and enterprises unable to actually enjoy the benefits of the policy [11]." Other studies have pointed out that "because the responsibility for the development of vocational education lies with local governments, and the government's financial "separate stoves" have made the pressure on relevant government departments to implement the functions and responsibilities of industry-education integration decrease layer by layer [12]."

Industry-education integration is in line with the overall interests of national economic and educational development, but the effective promotion and implementation of the industry-education integration policy requires the coordination and cooperation of other government departments, including the education administration department. The system involved in the industry-education integration of higher vocational education has three levels, namely the national economic system and education system, the national macroeconomic policy adjustment, and the regulation, norms and culture-cognition of the industry-education integration of vocational education [1]. For the first two systems, industry-education integration is only a small part of the content, and industry-education integration has to make corresponding concessions when it conflicts with its main business. At the same time, the implementation of the industry-education integration policy will involve the reshaping of the existing interest and responsibility mechanism or affect the interests of the corresponding government departments, or increase their workload, or even weaken the control and use of resources by some government departments, which is very likely to cause the problem of insufficient coordination between government departments.

3.2.2 Disadvantages of government-centered gaming

At present, the governance mechanism of higher vocational education in China is a government-centered co-governance, and the game of the interest subjects of the integration of industry and education in higher vocational education is also centered on the government, resulting in the following drawbacks. First, the government-centered policy system model of integration of industry and education has caused the majority of higher vocational colleges to shift from facing students, enterprises, and local economy to catering to policy needs, which is out of touch with reality. Second, the game model centered on the government will cause the government to be both a referee and an athlete. As a policy maker, the government leads the development direction of the integration of industry and education in higher vocational education, and needs to ensure the quality of the integration of industry and education through evaluation and other means. However, in the specific practice, in order to pursue performance, some

government departments use the existing standards or conditions of individual schools and enterprises as the standard requirements for the integration of industry and education, and even directly provide key support for the integration of industry and education for some schools and enterprises, resulting in a "false" prosperity of the integration of industry and education, which is not conducive to the long-term development of the integration of industry and education. Third, due to the influence of many factors such as industry, region, and economic development level, government departments cannot grasp the many changes in industry demand and the opportunities for school-enterprise cooperation as sensitively as enterprises and schools. Some scholars have pointed out that " thousands of educational organizations and industrial organizations carry out small-scale cooperation based on their own needs and are characterized by decentralized decision-making. It is unwise to rely on the government to govern ' small cooperation ' " [13]. Fourth, if the quality of industry-education integration is to be controlled, unified standards are needed. However, in order to prevent higher vocational colleges from deviating from the standards, the government often tends to build unified and easy-to-manage standards and requirements, which may lead to a single form of industry-education integration and serious homogeneity.

3.3 Game Issues of Enterprises

3.3.1 Misalignment of partners

From the perspective of government departments, if higher vocational colleges choose state-owned enterprises, industry-leading enterprises and other enterprise entities for industry-education integration cooperation, it will be easier to highlight performance and allocate resources. However, compared with well-known large enterprises and industry-leading enterprises, small and medium-sized enterprises are the important channels for absorbing higher vocational graduates into employment. Data show that in 2022, the proportion of higher vocational graduates who choose flexible employment such as part-time employment, freelance, and self-employment is 8.0%, and the proportion of employment in small and medium-sized private enterprises with a scale of 300 or less is 51%, an increase of 6% over the 2018 class. The problem is that the demand for talent types of large enterprises may not be consistent with that of small and medium-sized enterprises, and some large enterprises do not have employment needs for higher vocational graduates. As shown in a survey by the MyCOS Research Institute: "In the campus recruitment needs of the top 500 companies in China in 2022, a bachelor's degree has become the minimum threshold for entering the top 500 companies, accounting for 82.56%; the demand for master's graduates accounts for 15.63%, and the demand for doctoral graduates accounts for 1.81%. Compared with the classes of 2021 and 2022, the proportion of demand for master's and doctoral graduates in 2022 is on an upward trend. The demand for master's graduates in 2022 increased by 4.44 percentage points year-on-year, and the demand for doctoral graduates increased by 0.64 percentage points year-on-year." Therefore, if only large enterprises are selected as the main cooperation partners for industry-education integration, we will fall into the dilemma of misplaced cooperation partners.

3.3.2 There is a "free-rider" phenomenon among enterprises

In the integration of industry and education, enterprises accept students for internships and cultivate their practical abilities, which may lead to the phenomenon of "free riding" by some enterprises. The benefits of enterprises participating in the integration of industry and education largely depend on the action choices of other enterprises. If the skills of graduates from higher vocational colleges match the requirements of enterprises, or the benefits of participating in the integration of industry and education are higher than the costs of expenditure, enterprises will tend to participate in the integration of industry and education and school-enterprise cooperation. However, as far as the internship link of the integration of industry and education is concerned, when higher vocational college graduates can move freely in the labor market, graduates who participate in internships in one enterprise can be easily poached at low cost by other enterprises that do not provide internship positions, making it difficult for enterprises that integrate industry and education to cope with the risk of losing internship students. For enterprises that do not provide internship positions, selectively hiring graduates who participate in internships in other enterprises can save the investment cost of providing internship positions. Therefore, some enterprises do not participate in the integration of industry and education themselves, but take the "free ride" of other enterprises that participate in the integration of industry and education, and enjoy the dividends brought by the integration of industry and education through selective recruitment.

3.3.3 The dilemma of enterprises being “idealized”

In the game of stakeholders, enterprises are always idealized to have a strong demand for industry-education integration and have the ability to integrate industry and education, but this is not entirely true. First, there is more variability and uncertainty in enterprise development. Not all enterprises are suitable for participating in industry-education integration at any stage. For example, high-tech enterprises are more suitable for cooperation with research universities, while labor-intensive enterprises mainly rely on employees' high-intensity repetitive labor and assembly line operations to make profits, and do not have the basic conditions for participating in industry-education integration. At the same time, industry-education integration is not the only way for enterprises to make profits. When enterprises encounter factors such as difficulties in capital turnover, sluggish market environment, and oversupply of high-skilled labor, they are likely to give up participating in industry-education integration. In extreme cases, when enterprises face a survival crisis, industry-education integration is even more out of the question. Second, the so-called deep integration of industry and education requires enterprise representatives to participate in the preparation of school talent training programs, professional settings, curriculum arrangements, and teaching activity design, but most enterprise representatives are relatively lacking in professional qualities in higher vocational education course teaching. If they take the lead in the development of higher vocational education and teaching, it will damage the public welfare of vocational education to a certain extent.

3.4 Game Issues of Industry Organizations

3.4.1 The functions of the Bank's Guidance Committee are missing

As the main body of interests, industry organizations need to play their own unique functions in participating in the game of industry-education integration. Industry organizations are important organizations that coordinate the interests between enterprises or between enterprises and employees. Their main functions include avoiding free-riding in training, ensuring the quality of industry-education integration, and safeguarding the rights and interests of students and employees. However, the current industry organizations are weak and there are deficiencies in the realization of functions. Taking the Industry Steering Committee as an example, according to the relevant provisions of the "Notice of the General Office of the Ministry of Education on Recommending Members of the National Industry Vocational Education and Teaching Steering Committee (2020-2024)", the Industry Steering Committee is "commissioned by the Ministry of Education, led by the competent departments of various industries or industry organizations to take the lead in establishment and management,... members are composed of personnel from industry enterprises, vocational colleges, ordinary undergraduate colleges and research institutions, etc., and the proportion is generally: 40% for industry enterprises, 15% for secondary vocational schools, 40% for higher vocational schools, and 5% for ordinary undergraduate colleges and research institutions". The Industry Steering Committee has the following problems in performing its duties and realizing its functions: First, there is a phenomenon of "schools are hot and enterprises are cold". Although the number of representatives of industry enterprises and representatives of higher vocational colleges is the same, in the process of industry-education integration, there is often a problem that schools are more motivated than enterprises. The work of the industry-education integration of the industry steering committee is basically led by higher vocational colleges, and enterprises often only participate symbolically. Second, the alienation of industry enterprises from vocational education. Representatives of industry enterprises and industry authorities participate in the industry steering committee mainly on a part-time basis. They lack a deep understanding of the development policies of higher vocational colleges, and industry-education integration has not become an important performance indicator for their development, resulting in the marginalization of industry-education integration in the development of enterprises and industry authorities. Third, the lack of stakeholders. The lack of student and employee representatives in the industry steering committee not only makes it impossible for their rights and interests to be effectively protected through industry organizations, but also exacerbates the degree of information distortion in the supply and demand of talents for industrial development.

3.4.2 Game and monopoly between industries

First, there is fierce competition among industry organizations. The Ministry of Education proposed that "strategic emerging industries such as new generation information technology, integrated circuits, artificial intelligence, industrial Internet, energy storage, intelligent manufacturing, new biomedical materials, and life service industries such as elderly care, childcare and housekeeping" become the competitive targets of different industry organizations to carry out industry-education integration. In order to meet their own development needs, industry organizations are more inclined to incorporate related majors into their ranks to reflect their own industry characteristics, thus forming an excessive competition situation for popular majors. Second, industry organizations have a monopoly color. According to Adam Smith's description, the reason why liberal economics opposes industry organizations is that industry organizations often use their monopoly advantages to hinder the free flow of personnel and technological development and updating. He gave an example: "Perhaps only six wool combers are needed to keep a thousand spinners and weavers working continuously. At this time, if these wool combers unite and unanimously refuse to accept apprentices, then this process will be monopolized by them. In this way, they can control the labor price of wool combers in the entire wool manufacturing industry and obtain high wages that far exceed the deserved remuneration for this operation." Although the socialist market economic system with Chinese characteristics itself has a certain dissolving effect on industry monopoly, if the power and resources of industry organizations are unilaterally enhanced, it is necessary to remain vigilant against industry monopoly.

4. Path Selection for the Integration of Industry and Education in Higher Vocational Education

4.1 Putting Students First and Improving the System to Protect Students' Interests

4.1.1 Provide basic guarantee for students' development

First, students have put in relevant labor in the integration of industry and education, and they should be given basic remuneration. In particular, for students who choose to work in jobs that are not very profitable but necessary for social development, their internship remuneration should be slightly higher than the average level. Second, students participating in the integration of industry and education must have clear development prospects. Students need to clearly understand the benefits of participating in the integration of industry and education, such as shortening the probation time, accelerating the promotion process, and providing career guidance through the integration of industry and education. Third, ensure that students can learn professional knowledge and skills. The knowledge and skills gained by students participating in the integration of industry and education should be highly professional, and organizations should issue corresponding certificates to prove that they can be generally recognized by the industry.

4.1.2 Improve the system of "junior college to undergraduate" for higher vocational education

In view of the problems of "learning without taking exams" and "taking exams without learning" in the "junior college to undergraduate" exams and the professional skills learning of higher vocational education, one is to include professional

training in the score composition of the "junior college to undergraduate" exams on the basis of the existing system, so as to minimize the conflict between professional training and subject exams. The second is to increase the flexibility of the exams. In addition to unified exams, exams can also be dispersed according to time, and points can be accumulated to reduce the pressure on students when facing professional internships and "junior college to undergraduate" exams. The third is to meet the rigid demand of students to study for undergraduate degrees, avoid unnecessary waste of time and "diploma proliferation", optimize the structure of higher education, continue to expand the scale of vocational education undergraduates, and further increase the number of vocational education undergraduate schools.

4.1.3 Focus on the comprehensive development of students

First, the all-round development of students is an important goal. Students are given a certain right to speak and choose. When the interests of students conflict with the interests of enterprises, the interests of students need to be put first and corresponding support and help should be provided. Second, the procedures are open to protect the rights and interests of students. In particular, for the industry-education integration projects that the government prioritizes, the selection requirements and selection procedures must be open, and the selection conditions must be related to the goals of industry-education integration to avoid discrimination against students in disadvantaged schools. Third, a student rights protection organization should be established. Students can consult or request assistance from the school through the corresponding organization to avoid students becoming low-cost labor for certain companies during the industry-education integration process.

4.2 Focus on Practical Needs and Explore Diversified Models of Industry-education Integration

4.2.1 Explore diverse models of industry-education integration

The types and sizes of industries, sectors, and enterprises are diverse, and they are at different stages of development and use different management methods. Therefore, the forms of industry-education integration should be more diverse. As long as they can effectively meet the needs of schools, enterprises, and students, and without violating relevant national laws, regulations, and policies, schools and enterprises should be allowed to innovate independently and adopt models suitable for themselves to carry out industry-education integration. Vocational colleges should especially choose their own innovation paths according to their own characteristics and local conditions, and explore industry-education integration models with school, industry, or regional characteristics.

4.2.2 Improve the government’s participation in the integration of industry and education

As the advocate, promoter and regulator of industry-education integration, the government is an important factor in the symbiotic environment and has a transcendent status and role. Government departments at all levels can formulate relevant policies and systems according to actual needs, establish specific requirements and standards for industry-education integration, and at the same time adhere to the functions of guidance and regulation, and try to avoid specific administrative actions against a certain enterprise, so as not to aggravate unfair competition between industry-education integration enterprises and schools. Promote industry-education integration within the framework prescribed by the government and let a hundred flowers bloom and a hundred schools of thought contend according to actual needs, so as to achieve a smooth and effective advancement of the relevant policy process of industry-education integration.

4.2.3 Industry-education integration needs to focus on real needs

First, we need to accurately grasp the talent needs of industrial development. We need to strengthen scientific research on the talent needs of the industry, truly understand the level, structure and quality requirements of talent needs, and compare and analyze through big data to scientifically predict future talent demand trends. Second, we need to improve the quality of talent training. According to the talent demand situation, we need to use various resources and platforms of enterprises, governments, industries and schools to optimize the training methods, reform the education process, and improve the evaluation methods to meet the overall interests of enterprises, industries and society, while promoting the development of students. Third, we need to help enterprises solve technical problems. Higher vocational colleges have huge talent advantages. Through channels such as teachers' on-the-job training, visiting workers and students, and horizontal scientific research projects, they can not only help enterprises overcome technical development problems, but also help teachers in higher vocational colleges transform scientific research results and further improve the effectiveness of industry-education integration.

4.3 Optimize Diversified Governance and better Play the Role of Industry Organizations

4.3.1 Optimize multiple governance paths

First, equal consultation and voluntary entry and exit. As different stakeholders, industries, enterprises, schools, governments, and students should establish an equal interest consultation mechanism so that their respective interests have equal channels for expression. For relatively disadvantaged subjects such as students and small and medium-sized enterprises, more space should be given to express their interests. The integration of industry and education is mainly based on the voluntary choice of stakeholders to participate, and they are allowed to withdraw according to the predetermined procedures. Second, clear goals and equal opportunities. The goals of the integration of industry and education should be simple and easy to understand, and need to be unanimously recognized by the participating stakeholders. The policy of the integration of industry and education should be implemented equally for all stakeholders, and thresholds and requirements should not be set easily. Third, complementary advantages and clear division of labor. Make full use of the policy advantages of government

departments, the equipment technology and production practice advantages of enterprises, and the talent stock and teaching and training advantages of higher vocational colleges to stimulate students' enthusiasm for participating in the integration of industry and education and achieve common development and win-win cooperation.

4.3.2 Improve the level of collaborative governance

First, improve the professional analysis of industrial demand transformation. Industrial demand is an important goal of industry-education integration, but it cannot be directly transformed into a training goal. Higher vocational education should achieve orderly selection, systematic treatment and balanced development. The so-called orderly selection means that the needs that can be achieved through industry-education integration should be in line with the development goals of vocational education and talent training; the so-called systematic treatment means that industry-education integration needs to form a systematic knowledge and skills system from simple to complex, from easy to difficult; the so-called balanced development means that industry-education integration must consider the comprehensive development of students' body and mind. Second, classify and manage different majors. There are differences in the industry-education integration models of different majors. For example, majors such as automobile maintenance, CNC operation, and elevator maintenance should adopt an apprenticeship model of alternating work and study; while majors such as international trade, financial management, and clinical medicine should adopt a model of "theoretical learning-simulation training-internship practice". In short, industry-education integration can have basic quality requirements, but the forms should be diverse. It is best not to restrict different majors to carry out industry-education integration in a fixed form.

4.3.3 Avoid risks in industry-education integration

First, a dynamic adjustment mechanism for enterprise access should be established. In the process of industry-education integration, schools should carefully select cooperative enterprises, and should choose enterprises with stable development, good operating conditions, and good development trends in the industry. Second, improve the corresponding industry-education integration mechanisms and methods. Education is to cultivate talents for the future. In order to meet future challenges, the professional path of industry-education integration can be from basic courses to major categories and then to specific majors, which not only increases the flexibility of students' choices, but also is conducive to the stability of industry-education integration. Third, a risk plan mechanism should be established. It is necessary to clarify the property rights, interest distribution and responsibility of all parties involved in industry-education integration. By setting up plans, proper arrangements can be made for assets, students, debts and other matters, and some special funds can also be reserved for relief and compensation for emergencies in industry-education integration.

4.3.4 Better play the role of industry organizations

First, clarify the development goals of the industry. According to national policies and regional development needs, industry associations should clarify the development goals of the industry through sufficient research, and guide enterprises in the industry to work together to build an industry college and industry "industry-education integration" platform. Second, formulate an industry management system. Industry associations should establish and improve internal industry management systems around industry development goals, and use systems to regulate and constrain the behavior of enterprises in the industry. Third, ensure that industry organizations treat everyone equally. For the integration of industry and education in higher vocational education, many industries and sectors are ordinary and mundane, but they play an important role in improving people's livelihood and enhancing people's well-being, and need to be treated equally and supported in the integration of industry and education. Fourth, do a good job in supervising industry associations. Various entities such as the government, the media, and the public need to jointly strengthen the guidance and supervision of industry associations, promote the healthy development of industry association organizations, and avoid industry monopolies and other problems in the process of industry-education integration as much as possible.

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