

Research on the Path of Vocational Education Industry-education Integration under Stakeholders' Perspective

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Abstract:

As a mechanism to effectively connect educational resources with industrial practice, industry-education integration provides an essential path for cultivating talents who meet the needs of new technologies, industries, and formats. Based on the stakeholder theory, this study analyzes the practice of integration of industry and education between H vocational school and Z enterprise in Foshan, as well as the interaction mechanism and core role of various stakeholders in integrating industry and education. It is found that the guidance and support of the government, the active participation of enterprises, the educational innovation of vocational schools, and the active adaptation of students are critical elements of the integration of industry and education. Therefore, the government should optimize the development environment and establish a stakeholder coordination mechanism. Educational institutions and enterprises should innovate cooperation modes and realize resource sharing. We should fully stimulate the enthusiasm of all parties and promote benign interaction. The research has important theoretical and practical significance for guiding other vocational colleges and enterprises in integrating industry and education. It also enlightens the government to optimize the integration of industry and education in vocational education.

Keywords:

Stakeholders, Vocational Education, Industry-education Integration

1. Introduction

As a mechanism to effectively connect educational resources with industrial practice, industry-education integration provides an essential path for cultivating talents who meet the needs of new technologies, industries, and formats. [1] Based on the stakeholder theory, this study analyzes the practice of integration of industry and education between H Vocational School and Z enterprise in Foshan, as well as the interaction mechanism and core role of various stakeholders in integrating industry and education. It is found that the guidance and support of the government, the active participation of enterprises, the educational innovation of vocational schools, and the

active adaptation of students are critical elements of the integration of industry and education. Therefore, the government should optimize the development environment and establish a stakeholder coordination mechanism. Educational institutions and enterprises should innovate cooperation modes and realize resource sharing. We should fully stimulate the enthusiasm of all parties and promote benign interaction. The research has important theoretical and practical significance for guiding other vocational colleges and enterprises in integrating industry and education. It also enlightens the government to optimize the integration of industry and education in vocational education. [2]

The cooperation case between Foshan H Vocational School and Z Enterprise provides a unique perspective from which to observe and analyze the actual operation of the integration of industry and education. This cooperation case involves schools and enterprises, including the government, students, and other stakeholders, forming a complex interest network. Through the in-depth analysis of this case, we can reveal the interaction mechanism among various stakeholders in the process of integration of industry and education, identify the key factors that affect the stability and efficiency of cooperation, and then provide empirical support and theoretical guidance for the path optimization of integration of industry and education in vocational education. [3]

2. Definition and Fit Logic of Industry-education Integration Stakeholders

Stakeholder theory emerged in the 1960s, with the main idea that organizations should focus on and meet the needs of all stakeholders rather than focusing only on shareholder interests. Stakeholders include individuals or groups that can influence the achievement of organizational goals or be affected by organizational activities, such as enterprises, governments, industry associations, teachers, and students. [4] The theory fits well with the development of industry-education integration. Firstly, industry-education integration involves multiple stakeholders and requires the joint participation of schools, enterprises, governments, and other parties. Secondly, realizing the goal of industry-education integration needs to balance the interests of all parties, and the stakeholder theory provides a practical analytical framework for this. Therefore, using this theory to analyze the problem of industry-education integration can help clarify the interests of all parties and promote the healthy development of industry-education integration. Based on the categorization of stakeholders in industry-education integration by scholars at home and abroad, they can be divided into three categories: core stakeholders, general stakeholders, and other stakeholders. [5] This paper mainly focuses on the core and general stakeholders, i.e., local governments, vocational colleges and universities, enterprises, and students. It discusses their different demands and roles in industry-education integration. [6]

First, local governments play an essential role in guiding and supporting the process of industry-education integration in vocational education. The initial purpose of establishing higher vocational education is to fully explore its potential socio-economic value, cultural contribution, and political influence to enhance the effectiveness of governance and public satisfaction. From the perspective of human resources development, it aims to maximize the advantages of local human resources, deepen the integration of higher vocational education with the industrial sector, and deliver more highly skilled technical talents to society so as to alleviate the social employment problem. Secondly, enterprises are profit-oriented organizations closely related to the interests of vocational colleges and universities. They are the most

critical influencers in the vocational education industry-education integration process. They need to fulfill the obligations of formulating talent training programs with vocational colleges and universities, participating in the professional construction and curriculum development of vocational colleges and universities, opening up their advanced training venues and facilities and equipment to vocational colleges and universities, and providing students with natural workplace environments and operation opportunities. Thirdly, the core needs of vocational schools lie in optimizing the structure of education and human resources, fostering high-quality technical and skilled personnel while enhancing cultural self-confidence and promoting economic and social development. In addition, it needs to innovate a vocational culture with Chinese characteristics and create an open and vibrant educational ecosystem. As a transmitter of knowledge and skills, higher vocational education needs to consider the needs of both educators and recipients and ensure that the teaching content is in line with market demand. Fourthly, students are the main body and ultimate target of vocational education, expecting to acquire relevant skills through higher vocational education to meet the needs of first-time employment, career transition, and vocational skills upgrading. Therefore, students are concerned about the time of top internship in enterprises, the safety of site facilities, the content of experimental training, the improvement of personal skills in the process of industry-education integration, the development trend of the industry, the employing standard of enterprises, and the professional level of teachers all have an essential impact on the student's development. [7]

3. Case Analysis

3.1. Introduction of case

H Vocational School is located in Nanhai District, Foshan City, which is an essential national manufacturing base and the only comprehensive reform pilot city for manufacturing transformation and upgrading. In recent years, to cultivate more high-quality technical and skilled talents, Nanhai District has been focusing on cultivating and expanding “two high, four new” modern industrial clusters and unswervingly taking the road of new industrialization. Since the beginning of the establishment of the specialty in 2014, Z Enterprise and H Vocational School have established a close partnership; part of the enterprise production workshop was relocated to the campus, where the enterprise instructors carry out actual production operations. The enterprise provides internship opportunities for 3-4 interns every year all year round. The author entered Enterprise Z as a learner for about one month of participatory observation and gained a certain depth of understanding of the enterprise.

3.2. The path of industry-education integration between H vocational school and Z enterprise in Foshan city

3.2.1. Co-construction of practical training bases

In the process of Z enterprise choosing to move into the training base of H vocational school, the local government plays a vital role as the leading force of resource integration. First of all, in order to “attract enterprises into the school,” the local government gives preferential treatment in terms of finance, taxation, investment, finance, land use, price, and so on. In addition to on-campus training bases, it also builds off-campus training bases with Z enterprises and vocational colleges by allocating land and providing financial support, prioritizing recommending enterprises

to financial institutions for credit financing. Secondly, it is stipulated that as long as the enterprises are located in the training bases, water, and electricity for production and living are calculated at the price of that school, and the fees are paid regularly. These initiatives provide a more favorable business environment and support for enterprises and bring more opportunities and resources for industry-education integration to vocational schools, promoting mutually beneficial and win-win development for both sides and facilitating the formation of a closer industry-education integration relationship. [8]

3.2.2. Mutually beneficial and win-win cooperation model

The practical training base promotes resource sharing between enterprises and vocational schools, including technology, resources and knowledge. From the perspective of vocational schools, obtaining technical support provided by enterprises free of charge helps to reduce expenditure on information collection and skills training; for enterprises, the practical training projects of the school's specialized courses are often real production tasks of enterprises, in addition to enjoying the benefits of additional resources, such as water, electricity and rent.

First of all, Z Enterprises need to teach students by serving as part-time teachers of the school's second-level colleges, attending classes one day a week and relying on their rich practitioner experience to help students improve their professional skills. In the conditions for the construction of cultivation enterprises, "building industry-education integration training bases through school-enterprise cooperation, donating teaching facilities and equipment to vocational colleges and universities, or having the technical backbone of the enterprise teach part-time in higher education institutions or vocational colleges and universities" is listed as one of the conditions, which is not a mandatory requirement, but it is an important plus point in assessing the quality of talent cultivation. Secondly, the school stipulates that teachers, especially new recruits, are required to practice in enterprises for two months every year to enhance their understanding of the actual industry situation and improve their professional skills. In addition, if a student's work is well done, the owner of a Z enterprise will volunteer to use the company's existing equipment and materials to guide him or her in a vocational competition. This kind of mutual help is common, mostly in the form of small details, but it is precisely this kind of non-monetary benefit that brings together the two parties in an informal and mutually beneficial relationship. [9]

3.2.3. Strengthening of enterprise's main consciousness

The "profit-seeking" nature of enterprises often conflicts with the "public welfare" of vocational colleges and universities, and the high cost of education and training, high turnover rate, and other factors often make enterprises cautious about investing in interns' skills. However, Enterprise Z is deeply aware of its central role in commercializing research results and realizes that the market value of research results can only be realized through the enterprise platform. Therefore, Enterprise Z actively fulfills the agreement, invests in the training of talents in vocational colleges and universities, and makes every effort to transfer technology, which ultimately enjoys a high reputation in the training base and effectively enhances its social effect, reputation, and brand influence.

First, Enterprise Z has built a stable and productive technical exchange environment by clearly defining the roles of corporate management and interns. Within this framework, the company's owner attracts many students with career dreams by virtue

of its good reputation in the industry. On their part, the companies tend to select students with good reputations and potential, who generally have the vision of long-term development in Z companies or joining well-known companies, thus allowing them to select and absorb outstanding graduates at a lower cost. Secondly, in view of the fact that interns enter the company in batches due to differences in course schedules, Enterprise Z has skillfully constructed a hierarchy of interns' skill acquisition. Through the implementation of the internship mode of "bringing the old to bring the new," while maintaining a moderately stable scale of production, a small number of senior employees take on the critical role of technical guidance and skills training, who teach not only professional skills to the interns but also promote the expansion and deepening of the skills hierarchy through the verticalization of the division of labor system, [10] so that the interns who enter the enterprise earlier Z enterprises have effectively alleviated the inherent contradiction in the cooperation between enterprises and vocational colleges and universities by strengthening their own subjective consciousness, which not only provides students of vocational colleges and universities with more prosperous practical opportunities and skills training but also wins reliable technical support and talent reserves for the enterprises, realizing a win-win situation for both of them.

4. Implications for Promoting the Path of Industry-education Integration in Vocational Education

4.1. Optimize the development environment and establish an interest coordination mechanism

Government departments should create an excellent environment for the development of vocational education, establish a sound coordination mechanism for interests, and promote good interaction and articulation between the government, educational institutions, enterprises, and other interested parties. At the same time, it is also necessary to implement resource inputs and incentives for vocational education, encourage cooperative programs between schools and enterprises, and implement state-of-the-art academic knowledge through industrial applications to improve the attractiveness and competitiveness of vocational education.

In the case study, the local government played an essential role in the cooperation between Vocational School H and Enterprise Z in Foshan City. The government provided a more favorable business environment and support for the enterprise by issuing a pilot program on the construction and cultivation of industry-education integration-oriented enterprises, offering preferential treatment in terms of finance, taxation, investment, and finance, allocating land for the joint construction of off-campus training bases, and providing financial support, among other initiatives. At the same time, the government has also adopted flexible entry thresholds and preferential measures to allow enterprises to obtain cost-sharing mechanisms and other support within the training bases, thus incentivizing and promoting their participation in industry-education integration. This meets the needs of enterprises and helps vocational schools to nurture outstanding talents.

4.2. Innovative modes of cooperation and resource sharing

Educational institutions and enterprises can share educational and enterprise resources through cooperative relationships. For example, joint laboratories, school-enterprise cooperation, internship and training bases can be established. Educational

institutions should understand the needs of the industry and constantly adjust and update the educational content and training objectives to ensure that the students trained meet the real needs of the industry. At the same time, enterprises also need to actively participate in the process of education, provide resources and information needed by educational institutions, such as practice opportunities and job training, and work with educational institutions to develop training programs., to realize the docking of educational resources and industrial needs. In addition, information sharing and technological innovation can be promoted by establishing a communication platform between industry and education.

In this case, the enterprise uses the school's practical training center. The school introduces the enterprise's production tasks into the school as students' practical training projects. The two sides establish a mutually beneficial and win-win cooperation model by sharing resources and technologies. From the vocational school's perspective, they can reduce costs, provide students with actual practical training programs, and enjoy preferential benefits from the enterprise. On the other hand, enterprises can impart their own experience and skills to students by participating in teaching and, at the same time, guiding students to participate in skills competitions to enhance their competitiveness, ultimately forming a solid partnership and realizing a community of interests.

4.3. Motivating the enthusiasm of all parties and promoting positive interaction

In the leading position, students in industry-education integration and school-enterprise cooperation receive knowledge and skills. However, the biggest beneficiary of the acquisition of skills through humanized management is not only to make the students acquire the skills they need but also to let the enterprise get a return on their labor; the two promote each other and symbiosis.

In this case, Enterprise Z teaches the students and protects its legitimate rights and interests through the internship model of "bringing in the old to bring in the new." The enterprise owner breaks down complex skills into easy-to-understand and practice units and provides students with sufficient space and time for self-improvement, thus building a sustainable cooperation system based on skill sharing and labor value exchange. In this process, Z Enterprises did not use complicated tactics. However, they took the skills transfer as the core bond. They attracted students' deep participation and recognition through sincere communication and practice, which won the enterprises' valuable technical resources and talent reserves and realized deep industry-education integration and a win-win situation.

5. Conclusions

This study analyzes the role positioning and interaction mechanism of the four main stakeholders, namely, the government, enterprises, vocational schools, and students, in the process of industry-education integration, and focuses on how this cooperation model achieves resource sharing and complementarity of advantages, and how to establish a stable cooperation mechanism among different stakeholders, using the example of Foshan City's H Vocational School Z Enterprises. The study finds:

The government of Foshan City successfully retained Enterprise Z by adopting preferential measures and facilitated in-depth cooperation between the enterprise and Vocational School H. A mutually beneficial and win-win cooperation model was established between the enterprises and the vocational school to develop curricula,

practical training bases, and top-up internship programs jointly. At the same time, the students gained practical work experience and technical skills through participation in these programs. It can be learned that the practical path of industry-education integration requires the guidance and support of the government, the active participation of enterprises, the educational innovation of vocational schools, and the active adaptation of students. Through this multi-party synergy, the quality and adaptability of vocational education can be improved, and the sustainable development of the local economy can be promoted.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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