

Enterprise Participation in School-Enterprise Cooperation Research: Transaction Cost Paradigm

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Abstract: The transaction costs of school enterprise cooperation are related to the uncertainty of transaction, asset specificity and information asymmetry. On the basis of the study, the motivation of enterprise participation in school enterprise cooperation is discussed and the mechanism of enterprise participation in school enterprise cooperation is put forward by using transaction cost theory.

1. Introduction

In the field of school-enterprise cooperation, domestic and foreign scholars have proposed some relevant conceptual frameworks and research directions, representative of Skills Education [1], Technical Education Vanwyk Khobidi Chikasanda, Kathrin Otrell-Cass, Alister Jones. Teachers' views on technical education: implications for reforms towards a broad based technology curriculum in Malawi[2], Education Information [3], Apprenticeship [4.5] and so on.

2. The cost analysis of enterprises participating in school-enterprise cooperation

According to the process of school-enterprise cooperation, the cost of school cooperation is cut into three parts: bargaining cost, incentive cost and matching cost. The cost of school-enterprise cooperation is related to the uncertainty of talent training. In order to analyze the differences between enterprises and vocational colleges in coordinating school cooperation, a variable θ that can measure the uncertainty of cooperation in school enterprises is introduced. It is assumed that the cooperation of school enterprises may result in the possibility of θ due to its uncertainty. Assume that in the initial stage of school-enterprise cooperation, the cost required is one unit. With the advancement of school-enterprise cooperation, there may be a new school-enterprise cooperation plan, but in the end it is difficult to judge whether the new plan can be successful or judged. Which solution can be successful. After eliminating the completely uncertain scheme, the cost budget required for the uncertain scheme is a function of θ , which can be used to measure the transaction costs of school-enterprise cooperation. In the following, through the analysis of the three parts of the cost of school-enterprise cooperation, enterprises and vocational colleges are used to manage the transaction costs of school-enterprise cooperation.

2.1 Analysis of bargaining cost of school-enterprise cooperation

The bargaining cost of school-enterprise cooperation is the bargaining cost of the school-enterprise cooperation interest distribution. The expected benefits of school-enterprise cooperation are subject to certain risks due to uncertainty. Therefore, the expected return of the school-enterprise cooperation to invest in a certain bargaining cost is essentially a risk-return. It can be seen that the bargaining cost and the expected return are not positively related.

Assuming that the expected return of school-enterprise cooperation is E , the uncertainty of school-enterprise cooperation is θ , the probability of successful school-enterprise cooperation is $1/S$, and the unsuccessful return is 0. Assuming the risk is circumvented, the capital is C , and the marginal utility of capital is \cdot . When $0 < a < 1$, the effectiveness of school-enterprise cooperation is as follows:

$$U(\theta E) = \frac{(\theta E)^{1-\alpha}}{1-\alpha} \quad (1)$$

The expected utility of school-enterprise cooperation is:

$$\begin{aligned} E(U) &= \frac{(\theta E)^{1-\alpha}}{1-\alpha} \div \theta \\ &= \frac{E^{1-\alpha} \theta^{-\alpha}}{1-\alpha} \end{aligned} \quad (2)$$

It can be seen from equations (1) and (2) that if θ is larger, the expected utility will be smaller. It can be known from equation (1) that the utility θE of school-enterprise cooperation is linearly proportional to its uncertainty θ . If the θ is larger, the utility is larger, and the bargaining cost of the school-enterprise cooperation income is lower. On the contrary, the higher. The bargaining cost is related to the main body of the school-enterprise cooperation. The bargaining cost of the enterprise is negatively correlated with the uncertainty, because the cost of the enterprise's expected income is reduced with the increase of uncertainty. The bargaining cost of vocational colleges is positively related to uncertainty, because the cost of the expected income of vocational colleges increases with the increase of uncertainty.

2.2 Analysis of incentive costs for school-enterprise cooperation

Under the market competition mechanism, the incentive mechanism for vocational schools and enterprises to cooperate with schools and enterprises is different. As far as enterprises are concerned, enterprises accept the talents expected to be cultivated by school-enterprise cooperation, and set up corresponding incentive mechanisms for the successful cooperation of school enterprises in cultivating expected talents, but there is no guarantee for unqualified talents cultivated by school-enterprise cooperation. Only by ensuring the failure of school-enterprise cooperation, can we give full play to the advantages of the successful incentives of school-enterprise cooperation. Vocational colleges are different. Vocational colleges will guarantee the employment problems of the students they train, and they will give appropriate protection to students who have failed in school-enterprise cooperation to help them find employment. Therefore, the failure of vocational colleges to eliminate school-enterprise cooperation is eliminated internally, but the intensity of expected incentives for school-enterprise cooperation is reduced.

Assume that the expected return of school-enterprise cooperation is E , the expected return of successful school-enterprise cooperation is, the unsuccessful return is, the success probability of school-enterprise cooperation is $1/\theta$. Then there are:

$$\text{So } E = \frac{1}{\theta} E_s + (1 - \frac{1}{\theta}) E_f + P \quad (3)$$

The left side of (3) is the expected income of the school-enterprise cooperation, and the right side is the total cost of the enterprise supporting the school enterprise cooperation. Among them, P is the performance fee that the enterprise divides from the income to stimulate the cooperation between the school and the enterprise. In the market economy environment, the benefits of school-enterprise cooperation have two outcomes, either success or failure. When successful, the school-enterprise cooperation income is θE . In the case of failure, the school-enterprise cooperation income is zero. Then, the ratio of θ to θE can be used to measure the incentive intensity of school-enterprise cooperation.

The incentive intensity of enterprise school-enterprise cooperation is:

$$\frac{E_s}{\theta E} = 1 - \frac{E_f}{E} + \frac{1}{\theta} \times \frac{E_f}{E} - \frac{P}{E}, \quad E_s > E_f \quad (4)$$

In the vocational college environment, the benefits of school-enterprise cooperation failure are

determined. Therefore, the larger the value of θ , the weaker the incentive intensity of school-enterprise cooperation. From the perspective of cost, if the θ is larger, it is more difficult for vocational colleges to evaluate the results of school-enterprise cooperation. Under the organization of enterprises, the greater the uncertainty of school-enterprise cooperation, the greater the results of school-enterprise cooperation, and the sufficient investment in school-enterprise cooperation, and the lower the cost of school-enterprise cooperation.

2.3 Analysis of matching expenses of school-enterprise cooperation

Under market conditions, school-enterprise cooperation matching costs are mainly affected by factors such as the level of talent training (demand), equipment and technology (the goal of school-enterprise cooperation). If the enterprise's talent training goal is higher, the more professional schools and enterprises that cooperate with it, the easier it is to find matching targets; if the enterprise's school-enterprise cooperation is more clearly defined, the talent-training vocational colleges The more obvious the advantage, the less likely the school-enterprise cooperation will fail due to unsuccessful matching within the enterprise, which will reduce the matching cost of the enterprise.

The uncertainty of school-enterprise cooperation has made it difficult to measure the cost of matching. When enterprises and vocational colleges reach school-enterprise cooperation, they cannot predict the results of school-enterprise cooperation, and cannot judge whether the mode of school-enterprise cooperation is the best. The greater the uncertainty, the higher the cost of the business. In order to cope with the uncertainty of the results of school-enterprise cooperation, enterprises often increase the matching costs. By the same token, the higher the uncertainty, the higher the cost of searching for the match. It can be seen that the matching cost of both schools and enterprises is linearly proportional to.

3. The motivation of enterprises to participate in school-enterprise cooperation

3.1 Uncertainty in transactions

Under the conditions of enterprises participating in school-enterprise cooperation, due to a series of uncertainties such as accidents, information asymmetry and expectations of talent cultivation, the cost of negotiation between schools and enterprises has increased. It also makes it more difficult for school-enterprise cooperation.

Forecast uncertainty. For enterprises, enterprises provide equipment and technology to train students' technical skills, enhance the level of practice, and enhance the expected benefits of the company. If the quality of the students who are co-cultivated by the school-enterprise cannot meet the expectations of the enterprise, the expected income of the enterprise will be difficult to achieve. The quality of school-enterprise cooperation personnel training depends on the common influence of vocational colleges, enterprises and students. The greater the uncertainty, the more difficult it is to achieve the expected quality of school-enterprise cooperation personnel training, and the more difficult the company expects to benefit.

3.2 Asset specificity of the transaction

Wu Shanlin (2000) believes that "asset specificity makes potential after-operator behaviors potentially promising, and the higher the degree of asset-specificity, the more likely it is to "rip" or "make a slap" afterwards, and the resources spent on completing the transaction through the market. There are more resources than completing the same transaction within the integration. School-enterprise cooperation In the model, asset specificity refers to the vocational colleges cultivating talents for cooperative enterprises according to the needs of the market. Moreover, such targeted training talents are difficult to meet the needs of other enterprises. The expected value will be reduced, often leading to the misplacement of talent or unemployment.

Under the school-enterprise cooperation mode, vocational colleges complement each other with the advantages of enterprise equipment, technology, capital and other resources according to the

feedback and needs of enterprises, providing a special transaction for enterprises with required talents, and it is a transaction of persistent investment. Assuming that the results of the school-enterprise cooperation talent training have not been achieved, the opportunity cost will be low or even zero when this investment is transferred to other enterprises. If the school-enterprise cooperation contract is terminated for any reason, the company has no way to transfer the assets for other purposes. Due to the lack of legal guarantees, companies will tend to be vocational colleges in order to avoid high transaction costs in order to avoid asset specificity. As a result, vocational colleges are clearly in a favorable position, while enterprises with excessive investment in assets are at a disadvantage.

3.3 Information asymmetry of transactions

Dahlman (1979) pointed out that “Before the signing of the contract, it takes time and resources for both parties to understand each other's willingness to trade. When deciding to sign the contract, it is necessary to pay the cost of the decision on the terms of the transaction; after the contract is signed, the contract must be executed, as well as the control and supervision. The other party pays the cost of the contract.”

Under the conditions of a market economy, the information of the school-enterprise cooperative transaction has different information. There is a difference in the mastery of information between enterprises and vocational colleges. If enterprises often have sufficient information, they are relatively in an advantageous position in school-enterprise cooperation. In turn, the company is at a disadvantage. It is precisely because of the lack of information that before the school-enterprise cooperation signing, it may lead to the adverse selection of vocational colleges. When deciding to sign a contract, it may increase the cost of bargaining between the partners. After signing the contract, the vocational colleges increased the hidden costs of the transaction due to adverse selection, and the company increased the supervision cost in order to grasp the more reliable, sufficient and favorable information.

4. Mechanisms for enterprises to participate in school-enterprise cooperation

4.1 Defining the essential goal of school-enterprise cooperation

The essence of school-enterprise cooperation is the cooperation of talent cultivation. The reason why enterprises choose to cooperate with vocational colleges is to adjust the human resources strategy under the new resource endowment. School-enterprise cooperation is carried out in a certain social market economy environment. When the external environment changes, enterprises and vocational colleges need to be aware of this change, and actively make corresponding adjustments to adapt to the development of both sides. Therefore, the results of school-enterprise cooperation can be expressed as the requirements of both parties in adapting to changes in external markets under specific resource conditions. School-enterprise cooperation is costly. For enterprises and vocational colleges, either school-enterprise cooperation, transaction costs, or the original cost, the cost of environmental changes. This is the essence of the transaction costs of school-enterprise cooperation.

4.2 Reduce the uncertainty of the transaction

Strengthen school-enterprise information communication and reduce enterprise search costs and information costs. Give full play to the positive initiative of the school-enterprise industry associations, and through the school-enterprise cooperation industry associations, enhance the information communication between the two parties and reduce the uncertainty of the transaction. Through the school-enterprise cooperation industry association, participate in the training of talent training in vocational colleges and reduce transaction costs.

4.3 Improve the participation of enterprises in the school-enterprise cooperation system

Formulate relevant laws and incentives for promoting cooperation between schools and enterprises, clarify the responsibilities, rights and obligations of enterprises and vocational colleges,

define the legal boundaries of school-enterprise cooperation, constrain the trading behavior of enterprises and vocational colleges, and reduce the uncertainty of transactions. Formulate contractual norms for school-enterprise cooperation, curb opportunism, and reduce bargaining costs. We will improve the participation of enterprises in the school-enterprise cooperation system, encourage enterprises to cultivate training talents through school-enterprise cooperation, effectively reduce the cost of searching for talent information, and stimulate the participation of enterprises in school-enterprise cooperation to train the vitality of training talents.

4.4 Formulating flexible asset-specific policies

Under the conditions of enterprise participation in school cooperation, special assets refer to the economic resources invested by enterprises to train students. Since the special assets are difficult to be used for other purposes and generate value, the government can stimulate the enthusiasm of enterprises to participate in school-enterprise cooperation by establishing preferential policies related to specific assets. For enterprises to provide equipment, places and other resources to support the cost of student learning and internships, the government can reduce or reduce the exemption of special assets through taxation, reduce the cost of school-enterprise cooperation transactions, and stimulate enterprises to increase the training base. The investment and construction, targeted training of talents for enterprises, and constantly enhance the value of the company.

5. Conclusions

From the perspective of transaction costs, this study makes a preliminary analysis of the enterprise's participation in the cooperation of the lower-level enterprises in the field of vocational education research. However, due to the limitations of the actual conditions and their own level, there are still many defects and deficiencies. Future research needs to be resolved. Future research can conduct quantitative research on the cooperation between schools and enterprises from the measurement and quantification of transaction costs, test the conclusions of this study, reduce the subjectivity of researchers, and make the research more in-depth and meticulous, so as to obtain more useful research conclusions.

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