

The Mode of School-Enterprise Cooperation to Solve the Talent Dilemma of Small and Micro Enterprises

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Abstract: The rapid development of modern society and the rapid progress of science and technology have put forward higher requirements for talents in terms of both quality and quantity. At the same time, in the basic formation of China's socialist market economy system, intensified the competition of modern enterprises, how to get out of the talent dilemma has become a common problem for many enterprises. The purpose of this paper is to study the mode of solving the talent dilemma of small and micro enterprises based on school-enterprise cooperation. The paper analyses the growth strategy of micro and small enterprises and the effective mode of school-enterprise cooperation in solving the talent dilemma of micro and small enterprises, and takes College M as an example to analyse its effect in the process of "school-enterprise cooperation". The results of a questionnaire survey of students in College M show that most of the students, after practicing in the enterprise, agreed with the enterprise culture and management mode, which greatly helped to solve the talent dilemma of micro and small enterprises.

1. Introduction

Micro and small enterprises are a solid foundation for economic growth; a major channel for new employment; and a solid force for generating fiscal revenue. The importance of MSMEs is becoming increasingly evident, and the improvement of the regional economy depends on the development of MSMEs. For most enterprises, the talent dilemma is often treated as a management problem, thinking that strengthening talent management and improving salary packages to recruit, retain, and poach talent will solve the problem. For individual enterprises, this may be feasible, but for most enterprises, if they do this and do not cultivate talent, a vicious circle will be formed and the talent dilemma will worsen, seriously affecting China's economic development and social progress[1-2]. School-enterprise cooperation has emerged and developed along with the process of social development, and can meet the higher requirements for talent put forward by enterprises, becoming an effective way to resolve the plight of modern enterprises' talents [3-4].

Adebowale Owoseni takes the School of Food Engineering of Jilin University of Agricultural Science and Technology as an example to study and implement the applied university food professional talents. Based on the establishment of the university enterprise cooperation platform, the focus is on revising the talent training plan, reforming the curriculum system, building

off-campus practice bases, practical teaching, enterprise title classes and order classes to train students[5-6]. We will explore the model of university-enterprise cooperation in the cultivation of talent in dual disciplines in terms of "dual-type" teacher team building, university-enterprise cooperation, and university research cooperation. Marjeta Marolt proposes a basic framework for the innovation and entrepreneurship education model for network engineering majors in terms of educational policy, innovation and entrepreneurship department, social intermediaries, service platform, and student work, in view of the characteristics of universities and the demand for innovative and entrepreneurial talents in social and economic development. The roles and cooperation of all parties in the model are elaborated to provide guidance for the construction of an educational theory system and educational management mechanism focusing on cultivating innovation spirit and entrepreneurial practice ability [7]. Therefore, it is of practical significance to study the model of school-enterprise cooperation to resolve the talent dilemma of small and micro enterprises.

Current education reform is promoted through school-enterprise cooperation, and good results have been achieved in the process of practice. The comprehensive and in-depth research carried out on education theory has contributed to the high quality and efficient development of higher vocational education theory. This paper compares the theoretical achievements of school-enterprise cooperation model in higher vocational education by experts at home and abroad, and deepens the research on this basis to provide a theoretical basis for school-enterprise cooperation in cultivating talents; at the same time, the research of this paper also helps to further clarify its underlying theoretical logic, deepen the understanding of school-enterprise cooperation model from the theoretical point of view, and explain and explore the inner fit and linkage of the respective operational objectives of enterprises and schools.

2. A Study on the Model of School-Enterprise Cooperation in Solving the Talent Dilemma of Small and Micro Enterprises

2.1. Strategies for the Growth of Small and Micro Enterprises

(1) Introduce talent to enhance the competitiveness of enterprises

Due to the limitations of their own technical level, small and micro enterprises have a greater impact on the production risk and pricing risk of the process of investment in scientific and technological achievements absorbed by the enterprises, and have a certain impact on market risk [8-9]. Enterprises can improve their own technology level by introducing scientific and technological talents, strengthening the technical training of employees within the enterprise, deepening scientific research cooperation with universities, research institutes, or other enterprises, and increasing investment in scientific research. So that enterprises can more scientifically analyse the information of scientific and technological achievements when absorbing investment in scientific and technological achievements, timely discover the shortcomings of the scientific and technological achievements themselves, reduce the possibility of pricing risks and moral risks occurring, and deal with production problems in a timely manner during the production process, which has a certain preventive effect on the production risks of scientific and technological achievements; enhance the innovation ability of enterprises, which can effectively promote the secondary development of scientific and technological achievements, and avoid the impact of new technologies on the market. The emergence of technology has too great an impact on enterprise products, resulting in market risks [10-11].

(2) Strengthen the cooperation and exchange between small and micro enterprises and universities

Small and micro enterprises should take the initiative to strengthen the cooperation and exchange

with universities, firstly, to seek talents; secondly, to seek technical support; thirdly, to seek management consultation. To strengthen exchanges with university students, small and micro enterprises can provide a platform for university students to practice through such means as university talent entering small and micro enterprises for internship, and enterprises can also use this to seek talent, and if university students perform well during the internship period, they can be hired directly, and the internship period can be used to attract university students by offsetting the probationary period [12]. Strengthen the communication with engineering teachers in universities, take the initiative to seek technical help, carry out cooperation and exchange or jointly establish technology research and development centres, develop patented products with independent intellectual property rights, and strive to improve the technological content of products. Strengthen exchanges with teachers of economics and management in universities to consult on solutions to problems encountered by enterprises in business management and the strategic positioning of enterprise development. This way, we can improve the situation of confusion in enterprise management and unclear development orientation.

2.2. Effective Mode of School-Enterprise Cooperation to Solve the Talent Dilemma of Small and Micro Enterprises

(1) Strengthen school enterprise collaborative management

By building an effective communication platform and establishing a multifaceted communication and dialogue mechanism between education and industry, schools and enterprise, teachers and students and school enterprise, etc., members within the community can reasonably express their interests and different opinions, to lay a good cooperation foundation for the long-term development of the vocational education school-enterprise cooperation community. On the basis of equal consultation, school-enterprise cooperation should move from closed management to open management, and should move from monolithic school management to diversified governance, and jointly build a school-enterprise double-body management mechanism.

(2) Improve the evaluation mechanism of talent training

In response to the current school-based evaluation model, enterprises, industries, and third-party research institutions should be jointly involved in the process and quality evaluation mechanism of talent training, and the basic theories, technical skills and practical index systems necessary for student employment should be developed and standardised tests carried out based on data from empirical research on the market and industry. A multi-faceted, multi-level and multichannel evaluation system should be established within the school. The content of the evaluation should focus on both the evaluation of classroom theoretical learning and the evaluation of practical training.

(3) Build a "dual-teacher" teaching team with both practical and theoretical skills

Schools should not only pay attention to the introduction of talent and part-time teachers, but also to the cultivation of talent; in order to speed up the construction of "dual-teacher" teacher training bases and enterprise internship bases through school-enterprise cooperation, teachers must be selected to take up internships or senior positions in enterprises and participate in research and development by taking off work, exploring the establishment of a teaching or enterprise internship system, and strictly testing and Select the internship period.

3. Investigation and Research on the Model of School-enterprise Cooperation to Solve the Talent Dilemma of Small and Micro Enterprises

3.1. Questionnaire Method

This study is a case study of the development of school-enterprise cooperation in College M. A questionnaire survey was used to investigate the students in College M who had participated in school enterprise cooperation training. The respondents were mainly from the School of Mechanical and Electrical Engineering, the School of Information Engineering and the School of Civil and Architectural Engineering. After eliminating invalid questionnaires, 185 valid questionnaires were retained. The questionnaire consisted of 10 questions including basic information, covering four dimensions: survey on the development of school-enterprise cooperation, the practical role of school-enterprise cooperation, the areas that the school should improve, and the areas that the enterprise should improve.

3.2. Data Processing and Analysis

The results of the questionnaire were analysed using SPSS 22.0 software and a t-test was conducted. The t-test formula used in this paper is shown below.

$$t = \frac{\bar{X} - \mu}{\frac{\sigma X}{\sqrt{n}}} \quad (1)$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \quad (2)$$

Where equation (1) is a single overall test, s is the sample standard deviation and n is the sample size. Equation (2) is a double overall test.

4. Analysis and Research on The Model of School-enterprise Cooperation in Solving the Talent Dilemma of Small and Micro Enterprises

4.1. It is Conducive to Enhancing the Quality of Talent Cultivation in Applied Colleges and Universities

In the environment of school-enterprise cooperation, students can not only conduct theoretical learning in the classroom, but also go deep into the enterprise for practice. In this process, students can increase their further understanding of theoretical learning, improve learning efficiency, and better understand the production process and familiarize themselves with the production environment, and in the process of conducting production practice, further promote the planning and understanding of their future career and improve the quality of solving practical problems in the process of conducting production practice, they can further promote the planning and understanding of their future career and improve the quality of solving practical problems. The cooperation between schools and enterprises in applied universities is aimed at promoting employment, which can completely bridge the gap between university education and the needs of enterprises for talent.

In this study, the question of what impact the joint establishment of off-campus practice bases between colleges and enterprises has on students was investigated by means of a questionnaire, and

the results are shown in Table 1. As many as 76.7% of the students thought it was more beneficial to master professional knowledge, while the percentage of other and no significant influence was 0.5%, as shown in Figure 1. Through the questionnaire survey and analysis of College M, it is proved that "school-enterprise cooperation" has multilevel and multi-faceted significance in the cultivation of talent.

Table 1: Findings

option	Number of people	Proportion (%)
More conducive to mastering professional knowledge	142	76.7
The knowledge learned meets the job requirements	128	69.1
It is conducive to cultivating self-study ability	65	35.1
It is conducive to fostering innovation and management ability	45	24.3
It is conducive to cultivating the ability of cooperation and communication	106	57.2
It is conducive to the cultivation of practical ability	87	47
other	1	0.5
No obvious impact	1	0.5

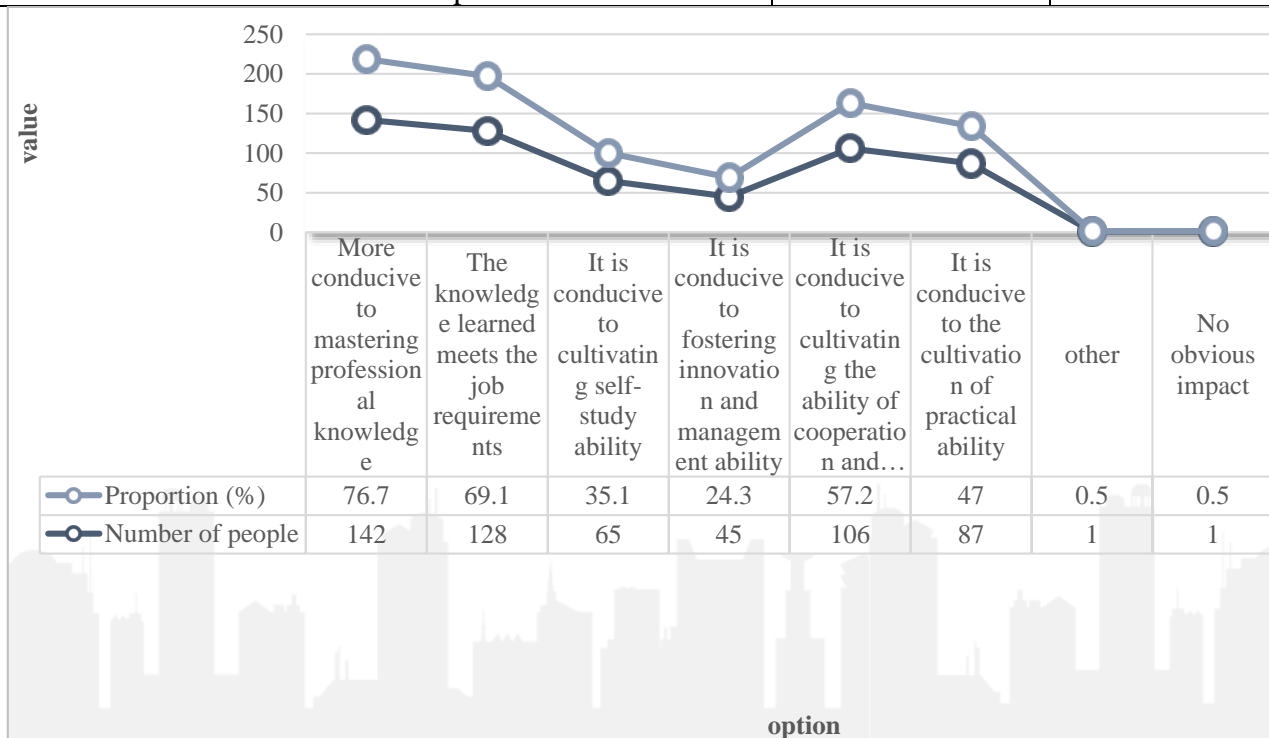


Figure 1: Statistical chart of the impact of school enterprise joint establishment of off-campus practice base

4.2. It is Conducive to Increasing the Economic Return of The Enterprise

In the survey of students' actual feelings during their practice in the enterprise, a total of 5 options were set, and this question was a multiple choice, of which 54.84% of the students thought they strongly agreed with the enterprise culture and management mode. A certain percentage of students also indicated that they were willing to continue to work in this enterprise after graduation, as shown in Figure 2.

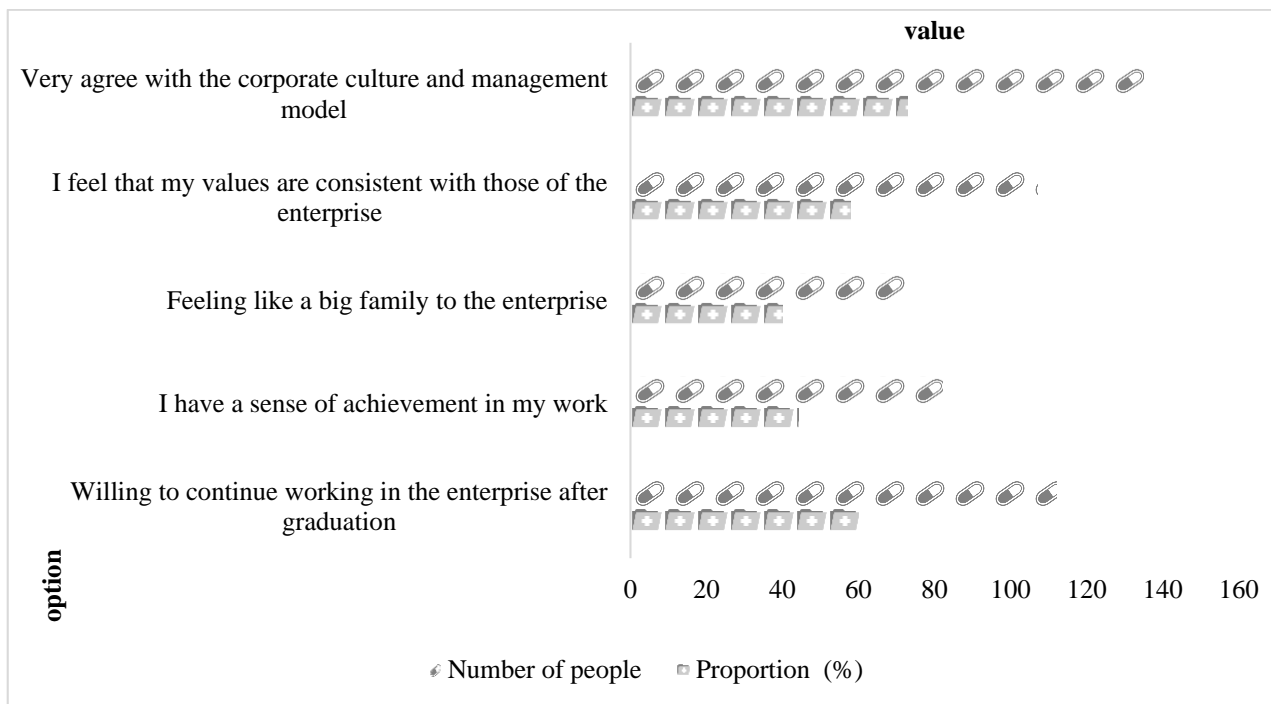


Figure 2: Statistical Chart of Perception of Enterprises

Competition is not only for markets and products, but also for talent. Unlike the previous model of single talent recruitment, today more companies are taking into account talent development. In addition to the talent advantage, companies need to pay more attention to the corporate image and external reputation. The "school-enterprise cooperation" model provides enterprises with the opportunity to establish a good corporate image and demonstrate an excellent corporate culture. Companies should not only focus on immediate profits, but should also pay more attention to the establishment of their own culture and capital operations, such as corporate culture. This shows that "school-enterprise cooperation" is a good opportunity for enterprises to build themselves, and it is also a process in which schools and enterprises promote each other and benefit from each other.

5. Conclusions

In the face of the current social development needs, it has become imperative to promote the innovation of school-enterprise cooperation mode, which is also an important way to focus on solving the supply of high-quality talents. This paper conducts an in-depth study of the performance of China's modern enterprise talent dilemma and makes a systematic analysis of its causes and studies how to solve the problem of China's modern enterprise talent dilemma from the perspective of school-enterprise cooperation. It is recognised that the talent dilemma of enterprises has a profound social background and historical development reasons, not only is it a problem of talent management, in the long run, it is a problem of talent training, and school-enterprise cooperation is an effective way to solve this problem. In particular, it is necessary to raise the awareness of government leaders and business leaders, to pay real attention to school enterprise cooperation, to establish a sound system and mechanism for school-enterprise cooperation, to increase the investment in school-enterprise cooperation, to promote the healthy development of school-enterprise cooperation in China, and to effectively improve the difficult situation of talents in enterprises. In addition, we put forward our own views on how to strengthen school-enterprise cooperation, to provide some valuable references for improving the level of school-enterprise

cooperation and better serving the cultivation of talent in China.

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References

- [1] Ahmed El-Deeb. *The Human Side of the Tech Industry: Key Drivers behind the Tech Talent Dilemma*. *ACM SIGSOFT Softw. Eng. Notes* 47(1): 10-11 (2022)
- [2] Hamza Ladeg, Rachid Chalal. *New architecture of enterprise social networks for knowledge sharing within engineering school*. *Int. J. Knowl. Learn.* 15(1): 16-34 (2022)
- [3] Mohammad Nabil Almunawar, Anizzah Auzzali, Nur'Amalina Haji Oseli, Wan Zaleha Ariff Md Zain Ariff. *E-Commerce Adoption among Micro, Small, and Medium Enterprises in Brunei Darussalam*. *Int. J. E Bus. Res.* 18(1): 1-18 (2022)
- [4] Mahesh S. Kavre, Bhaskar B. Gardas, Vaibhav S. Narwane, Nima Jafari Navimipour, Senay Yalçın: *Evaluating the Effect of Human Factors on Big Data Analytics and Cloud of Things Adoption in the Manufacturing Micro, Small, and Medium Enterprises*. *IT Prof.* 24(4): 17-26 (2022)
- [5] Alejandro J. Cataldo, Gabriel Pino, Robert J. McQueen. *Size matters: the impact of combinations of ICT assets on the performance of Chilean micro, small and medium enterprises*. *Inf. Technol. Dev.* 26(2): 292-315 (2020)
- [6] Adebowale Owoseni, Hossana Twinomurinzi. *Evaluating mobile app usage by service sector micro and small enterprises in Nigeria: an abductive approach*. *Inf. Technol. Dev.* 26(4): 762-772 (2020)
- [7] Marjeta Marolt, Hans-Dieter Zimmermann, Anja Znidarsic, Andreja Pucihar. *Exploring Social Customer Relationship Management Adoption in Micro, Small and Medium-Sized Enterprises*. *J. Theor. Appl. Electron. Commer. Res.* 15(2): 38-58 (2020)
- [8] Diana Rojas-Torres, Nir Kshetri. *Big Data Solutions for Micro-, Small-, and Medium-Sized Enterprises in Developing Countries*. *IT Prof.* 21(5): 67-70 (2019)
- [9] Tessa Borgonjon, Broos Maenhout. *An exact approach for the personnel task rescheduling problem with task retiming*. *Eur. J. Oper. Res.* 296(2): 465-484 (2022)
- [10] Christina Ling-hsing Chang, Sheng Wu. *The Circumplex Model for Structuring Career Anchors of the IT/IS Personnel*. *J. Glob. Inf. Manag.* 30(1): 1-27 (2022)
- [11] Muhammad Anshari, Mohammad Nabil Almunawar, Abdur Razzaq. *Developing Talents vis-à-vis Fourth Industrial Revolution*. *Int. J. Asian Bus. Inf. Manag.* 12(4): 20-32 (2021)
- [12] Peide Liu, Mengjiao Shen, Witold Pedrycz. *MAGDM Framework Based on Double Hierarchy Bipolar Hesitant Fuzzy Linguistic Information and Its Application to Optimal Selection of Talents*. *Int. J. Fuzzy Syst.* 24(4): 1757-1779 (2022)