

Research on the Integration Mechanism of Industry and Education in the Training of Foreign Language Service Talents

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Abstract: With the acceleration of globalization and the deepening of international economic and trade cooperation, the demand for small language and compound foreign language talents in the market continues to grow. However, the current training model in universities is relatively lagging behind, and the applicability of curriculum design is not strong, which makes it difficult for graduates to meet the actual needs of international work. This study is based on the theory of collaborative innovation and proposes the construction of a "related departments school enterprise action" linkage mechanism to optimize the foreign language service talent training system. In response to the low efficiency of industry education integration and low participation of enterprises, it is recommended to take the following measures: 1) establish a collaborative education mechanism and promote the "order based training+project-based teaching" model; 2) Establish a resource sharing mechanism, integrate enterprise real case libraries with university teaching resources; 3) Implement a dynamic adjustment mechanism and continuously optimize the curriculum system using AI technology; 4) Establish an evaluation feedback mechanism and introduce economic and social benefit indicators to assess the quality of training. This mechanism aims to strengthen the cultivation of language service talents for countries, and better support the needs of international cooperation and exchange.

Keywords: Foreign Language Service Talents; Integration of Industry and Education; Mechanism

1. Research Background

With the acceleration of globalization and the deepening of international economic and trade cooperation, the demand for professional service

talents with foreign language communication skills is growing. Since the the Belt and Road Initiative was proposed in 2013, China has signed cooperation agreements with more than 150 countries and more than 30 international organizations. According to the report on the economic and trade cooperation achievements of the "the Belt and Road" issued by the Ministry of Commerce of the People's Republic of China in 2023, international cooperation continues to expand in economic and trade cooperation, infrastructure construction, cultural exchanges and other fields[1] . In 2023, the "the Belt and Road" Language Talent Training Plan issued by the Ministry of Education pointed out that the demand for official languages of countries along the line is growing, and there is a significant gap in small language translation and localization services. Enterprises are in urgent need of talents with the ability of "foreign language plus specialty" [2]. The "Development Report of China's Language Service Industry" released by the China Translation Association in 2023 shows that the demand for relevant language service positions will increase by 40% in 2022, while the enrollment scale of small language majors in universities will grow slowly[3] .Foreign language education places too much emphasis on language skills, with significant differences between curriculum design and actual needs, and limited participation of enterprises in talent cultivation. In this context, how to effectively cultivate foreign language service talents who can adapt to international needs has become a focus of attention for both the education and industry sectors. As a new type of education model, the integration of industry and education emphasizes the deep cooperation between education and industry, aiming to improve the quality and efficiency of talent cultivation through school enterprise cooperation, industry university research integration, and other means, and meet the needs of social and economic development. This model not only helps students gain practical work experience, but also makes

educational content more in line with market demand, thereby cultivating more foreign language service professionals who meet international standards.

2. Literature Review

2.1 Research on Language Service Demand of "the Belt and Road"

The domestic academic community is generally concerned about the change of the demand for language professionals in the "the Belt and Road" initiative. Li Yuming (2015) proposed that "language proficiency constitutes a national strategic resource" and emphasized the fundamental role of language services in international communication[4]; Wang Hui (2017) revealed the insufficient coverage of official languages in countries along the "the Belt and Road" through quantitative analysis, pointing out that the talent gap in small languages is as high as 70% [5]; Shen Qi (2019) believes from the perspective of cultural inheritance that language services should pay attention to both "instrumental" and "humanistic" aspects[6]. In the field of international studies, Phillipson (2016) critically examined the negative impact of "linguistic hegemony" on international cooperation and advocated for achieving equal multilingual services[7]; Garc í a (2017) proposed the theory of "translingual practice", emphasizing the importance of cross linguistic competence in the context of globalization [8].

2.2 Theoretical and Practical Research on the Integration Mechanism of Industry and Education

In the current education and industry sectors, the theoretical and practical research on the integration mechanism of industry and education has become a hot topic of concern. From a theoretical perspective, research on the mechanism of industry education integration involves multiple disciplines such as education, economics, and management. Scholars have explored the theoretical basis, model construction, policy support, and potential challenges and risks of the integration of industry and education. At the practical level, research on the integration mechanism of industry and education places more emphasis on case analysis and empirical research. Huang Yao (2018) constructed a "government school

enterprise action" collaborative education model, emphasizing the importance of a mechanism for sharing benefits[9]; Shi Weiping (2020) proposed the "four helix" dynamic model of vocational education industry education integration[10]. In terms of international experience, Germany's "dual system" model cultivates applied talents through enterprise led practical teaching; The "teaching factory" model in Singapore embeds enterprise projects into the curriculum system[11].

2.3 Research on Innovation of Foreign Language Talent Training Mode

In the field of interdisciplinary training, Wen Qiufang (2018) proposed the path of "English+major" composite talent cultivation [12]; Sun Youzhong (2020) advocates that equal emphasis should be placed on "cross-cultural competence" and "international communication competence" in the curriculum system. Regarding digital transformation[13], Wang Lifei (2022) has developed a "Language Service Digital Literacy Framework" that includes capabilities such as corpus technology and localization tool applications[14]; Dudley Evans and St. John (1998) proposed the theory of English for Specific Purposes (ESP), emphasizing that curriculum design should be guided by needs analysis [15]. In the "the Belt and Road" special research, Zhang Zhiguo (2021) analyzed the characteristics of the demand for language service talents in Southeast Asia[16]. In summary, most studies only focus on single areas such as curriculum reform or school enterprise cooperation, lacking comprehensive research on the chain of "needs analysis mechanism design effectiveness evaluation". The depth of digital integration is insufficient, and the discussion on the application of artificial intelligence and big data technology in the integration of industry and education is superficial, lacking a technology driven dynamic adjustment mechanism. Theoretical models are mostly based on macro policies, lacking micro data support for enterprise participation and graduate career development. Therefore, in this study, the industry education integration mechanism of foreign language service talent training in the context of the "the Belt and Road Initiative" is discussed in depth, the structural contradiction between the foreign language education system and industry demand is analyzed, the core competence demand of

language service talents is clarified, the existing training mode is diagnosed, the four-dimensional linkage mechanism framework of industry education integration of "government school enterprise practice" is designed, and the demand oriented, in-depth collaboration between school and enterprise foreign language service talent training path is constructed.

3. Theoretical Framework

Based on the collaborative innovation theory, this study focuses on the language service needs of the "the Belt and Road", and defines three core goals of compound, cross-cultural, and technology application capabilities; Based on the theory of vocational education and industry integration as a practical path, through the school enterprise collaborative education platform, the two-way flow and sharing of resources such as teachers, courses, and data can be achieved. Guided by the theory of demand-oriented education, and based on market demand feedback and technological iteration, establish a dynamic update mechanism for talent training programs, curriculum systems, and evaluation standards. Establish a tripartite mechanism framework for the integration of industry and education, consisting of "goal collaboration, resource integration, and dynamic optimization"

The core viewpoint of collaborative innovation theory is that innovation entities such as universities, enterprises, governments, and industries achieve a dynamic balance of knowledge production, technology transformation, and value creation through resource integration and collaborative cooperation[17]. The application path is to build a five in one coordination mechanism of "government, industry, university, research and application", and promote the precise connection between the training of foreign language service talents and the market demand of the "the Belt and Road" language service[18].

The core viewpoint of the theory of vocational education and industry integration is that vocational education should be guided by industry demand, and the practicality of talent cultivation should be achieved through the "three integrations" of professional chain and industry chain, curriculum content and vocational standards, and teaching process and production process. The application path is to combine the "the Belt and Road" language service industry

chain, such as international exhibitions, cross-border e-commerce, legal translation, design modular courses, and introduce real enterprise projects as teaching carriers [19]. The core viewpoint of demand-oriented education theory is that educational goals should be dynamically adjusted based on national strategies, industry demands, and individual career development to ensure a match between talent supply and market demand. The application path is to define the capability matrix of foreign language service talents along the "the Belt and Road" through industry research and post capability analysis, such as the language service industry standards, and build a closed-loop system of "demand analysis - capability training - evaluation feedback".

4. Analysis of the Current Situation and Problems of Foreign Language Service Talents Training in the "the Belt and Road" Initiative

4.1 The Demand for Composite Talents is Increasingly Prominent

Southeast Asian and Central Eastern European countries urgently need talents who can master foreign languages and professional skills such as law, engineering, and cross-border e-commerce. These talents should possess cross-cultural communication and localized service capabilities. At the same time, there is a shortage of talents in minority languages and professional fields, and Chinese enterprises face translation and legal document localization issues in infrastructure and energy projects. Translation of technical and legal documents requires proficiency in technical terminology and cultural sensitivity. Language communication barriers lead to contract disputes, with 67% of companies reporting language misunderstandings and poor communication as the main issues. 43% of companies experience increased costs and time due to cultural differences affecting project progress.[20]

4.2 The Implementation of the Policy of Integrating Industry and Education is Inefficient

The implementation rate of the school enterprise joint construction training base policy launched by the relevant departments in 2019 is less than 40%, indicating that the implementation effect of the policy is not satisfactory. In addition, the implementation of tax incentives for enterprises

has also encountered many challenges, which may include inadequate policy promotion, insufficient understanding of policies by enterprises, and administrative obstacles in the implementation process. Secondly, the low participation of enterprises is a problem that cannot be ignored: under the EU's "dual system" education model, enterprises enjoy greater decision-making power and can effectively interact with educational institutions to jointly cultivate talents that meet market demand; However, in China's school enterprise cooperation model, resources often flow in a one-way manner, where schools provide human resources to enterprises but enterprises lack sufficient motivation to participate, resulting in less than ideal depth and breadth of school enterprise cooperation.

4.3 Insufficient Motivation for Enterprise Participation

In the current practice of integrating industry and education, the lack of motivation for enterprise participation has become a key obstacle to the implementation of the mechanism. Huang Yasheng (2022) found through empirical research that enterprises generally face the problem of cost-benefit imbalance. Due to the long investment return cycle of talent cultivation, usually exceeding 3 years, their willingness to participate in industry education integration is significantly reduced [21]. This conclusion is further validated in the "White Paper on Industry Education Integration Investment in Chinese Enterprises (2023)", which states that language service companies' average annual investment in industry education integration accounts for only 1.2% of their revenue, far lower than the manufacturing industry (3.5%) and the IT industry (4.8%); Meanwhile, government subsidies can only cover 12% of the relevant costs for enterprises, leading 73% of enterprises to believe that such investments are "economically insufficient". This phenomenon indicates that relying solely on policy subsidies is difficult to activate deep participation of enterprises, and it is necessary to improve sustainability through the design of mechanisms for risk sharing and benefit sharing.

4.4 The Scarcity of International Practice Platforms

According to the data released by UNESCO in 2022, the number of practice bases jointly

established by Chinese universities and countries along the "the Belt and Road" accounted for only 7% of the total number of global international cooperation projects, which was significantly lower than the 35% of EU countries and 28% of the United States. This data reveals the obvious shortcomings in China's construction of international practice platforms. In order to enhance the level of this field, China needs to further strengthen its cooperation with international partners, actively expand cooperation channels, and provide more diverse and abundant practical opportunities for foreign language professionals to promote their competitiveness and adaptability in the context of globalization[23].

5. Construction of Industry Education Integration Mechanism

5.1 Collaborative Education Mechanism

5.1.1 Four party linkage model of government school enterprise industry

On the basis of the "triple helix theory", the four party linkage model of government school enterprise industry has joined industry organizations, forming a more comprehensive collaborative innovation system[24]. Industry associations serve as bridges to strengthen the connection between the industrial chain and the education chain. This model emphasizes government guidance and diversified investment, requiring local governments to build industry education integration platforms, industry associations to conduct demand research and standard setting, enterprises to provide job resources, and universities to optimize talent training programs. The case of the Language Services Committee of the China Council for the Promotion of International Trade shows that this model effectively improves the efficiency of job matching.

5.1.2 Combining "order based training" with "project-based teaching"

According to the theory of "experiential learning cycle", project-based teaching simulates real enterprise tasks, such as complex situations involving cross-border e-commerce dispute mediation, to help students learn and master relevant knowledge in practice, thereby achieving internalization and improvement of abilities. In the "International Talent Training Agreement for 'Chinese+Technology' in the Field of Rail Transit" signed between CRRC

Group and Beijing Foreign Studies University, composite job requirements such as "German+Mechanical Engineering" and "Russian+Electrical Automation" were proposed. Based on this, universities customized modular courses and students directly participated in overseas project internships. The proportion of graduates joining CRRC Overseas Branch reached 76%. The Blue Book on the Effectiveness of Industry Education Integration in Chinese Universities in 2023 shows that majors adopting the "order+project" model have a starting salary 32% higher than traditional models for graduates; The satisfaction rate of enterprises towards graduates has increased from 54% to 82% in terms of job competency.

5.2 Resource Sharing Mechanism

The implementation of resource sharing mechanism needs to be based on openness and cooperation, and ensure the quality and safety of resources through standardized and regulated processes. At the same time, modern information technologies such as cloud computing and big data need to be utilized to support the storage, management, and distribution of resources, thereby achieving dynamic configuration and on-demand allocation of resources. Taking Huawei Technologies Co., Ltd. as an example, in its released "Global Language Service Resource White Paper", the publicly available enterprise case library includes localization project documents from 62 countries, which are rich in content and cover various industries and fields. These valuable resources can be utilized by universities to develop more scenario based and practical teaching modules, thereby improving teaching quality and students' practical skills.

5.3 Dynamic Adjustment Mechanism

The dynamic adjustment mechanism ensures that the course content can keep up with the pace of industrial development and meet the constantly changing market demands. Curriculum optimization and adjustment need to be based on the actual needs of the industry. This means that educational institutions must closely monitor industry trends, analyze the latest developments in the labor market, and predict changes in future skill demand. According to the prediction of the World Economic Forum, it can be seen that the skills demand of the countries along the "the Belt and Road" for language service posts is

changing. For example, the demand for AI assisted translation is expected to increase by 37%. This trend requires courses to be dynamically updated to adapt to the market change. Secondly, artificial intelligence and big data technology can also be utilized for demand forecasting. By analyzing the natural language processing (NLP) data of countries along the "the Belt and Road", we can accurately identify the gap of small language talents.

5.4 Evaluation and Feedback Mechanism

Establish a multidimensional evaluation system, adopt the OECD's "social benefits" indicator, and comprehensively evaluate educational outcomes. Conduct graduate tracking and quality feedback. The Institute of Education Economics at Peking University has made active attempts in this regard. They adopted a mixed research method in the "Tracking Survey Report on the Employment Quality of College Graduates", combining quantitative analysis and qualitative research to deeply explore the bottleneck problems encountered by graduates in their career development process. These research results not only provide a basis for universities to improve the quality of education, but also support the design of feedback loops to ensure the continuous improvement of education quality.

6. Case Study

6.1 Drawing on Successful Experiences of Industry Education Integration both Domestically and Internationally

6.1.1 Germany's "dual system" education model The enterprise is responsible for bearing 70% of the training costs. Students will have three to four days of practical training at the enterprise per week, and the remaining one to two days will receive theoretical education at school; According to the German Vocational Education Act, cooperation between enterprises and schools is mandatory, and those enterprises that fail to participate in the cooperation are required to pay a "vocational education tax"; The vocational qualification certificate issued by the German Chamber of Commerce and Industry (IHK) is recognized nationwide. For China, it is recommended to revise the current Vocational Education Law to clarify the tax preferential policies for enterprises in the integration of industry and education, such as reducing or

exempting corresponding value-added tax based on the number of students trained; In Germany, the proportion of small and medium-sized enterprises participating in vocational education is as high as 83%, while in China, this proportion is only 37%. Therefore, it is urgent to solve the problem of insufficient motivation for enterprise participation.

6.1.2 Practical exploration of the China ASEAN Language Service Collaborative Innovation Center

Joining hands with chambers of commerce from the ten ASEAN countries, Chinese enterprises such as China Road and Bridge Corporation, and translation companies, we have jointly established the "ASEAN Language Service Database"; Specialized orientation courses such as "Vietnamese+cross-border logistics" and "Thai+tourism management" were opened, and enterprises provided practical cases, such as contract translation of China Laos railway project; The student entrepreneurship team provided localized services for e-commerce enterprises in the ASEAN region and successfully incubated 23 "ASEAN Live Streaming Sales" projects, promoting employment for over 500 people. The employment rate of graduates in the ASEAN region has increased from 41% in 2019 to 68% in 2023; The cultural mistranslation rate has been reduced by 52%, and the project delivery cycle has been shortened by 30%.

6.2 Special Case of "the Belt and Road"

6.2.1 The "Small Language+Cross border E-commerce" project jointly promoted by a certain higher education institution and Chinese enterprises

Due to language barriers in the Central and Eastern European markets, such as Polish and Hungarian, the conversion rate of Chinese companies' product detail pages is 40% lower compared to English speaking regions. To this end, the company provides multilingual product copy and a dataset of over one million customer service conversations; Higher education institutions have developed course modules on "Small Language SEO Optimization" and "Cross Cultural Consumer Psychology". The number of participating higher education institutions reached 6, with 320 students, and cooperative enterprises including Alibaba International Station SHEIN. Quoting the third-party evaluation report on the effectiveness evaluation

of cross-border e-commerce talent industry education integration training in 2023. Students are divided into small groups responsible for the operation of independent sites, and companies pay corresponding training allowances based on sales revenue. During the student training period, the average number of orders processed per person was 15 in the traditional mode compared to 42 in project-based teaching. Through this project, the average order conversion rate of independent student sites reached 7.2%, exceeding the industry average by 5.1%; 84% of graduates are employed by companies within the Alibaba International ecosystem, with starting salaries 45% higher than traditional foreign language majors.

6.2.2 Analysis of the effectiveness of the construction of language service industry colleges

Enterprises such as Chuanshen Yulian participate in the college council through "resource investment" and have voting rights for course design. Jointly establish an "AI assisted translation laboratory", where the enterprise provides patented algorithms such as neural network machine translation engines, and students participate in the annotation of corpus and optimization of models; Every year, 12 startups in the language service field are incubated, of which 3 have successfully obtained financing of millions. For example, the Indonesian engineering document translation service provided for the Jakarta Bandung high-speed railway has an error rate of less than 0.5 %; In 2022, the revenue of enterprises related to industrial colleges exceeded 230 million yuan, with teaching feedback funds accounting for 18% of approximately 41.4 million yuan, and the purchase of AI translation equipment accounting for 62%.

6.3 Case Comparison and Experience Extraction

As shown in Table 1, in terms of subject roles, the German dual system is characterized by enterprise leadership and government supervision, emphasizing the core role of enterprises in talent cultivation; The China ASEAN Center adopts a collaborative model of "government school enterprise action" to integrate resources through multi-party linkage; The combination of minority languages and e-commerce projects relies on the exchange of resources between schools and enterprises.

Enterprises provide data and cases, while universities develop course modules to achieve resource complementarity.

Table 1. Comparison of Domestic and Foreign Cases of Industry Education Integration

Dimension	Germany Dual System	China ASEAN Center	Small Language+E-commerce Project
Main role	enterprise led, government supervised	government school enterprise cooperation	two-way resource exchange between schools and enterprises
Core Technology	Standardization Training Equipment	Multilingual Database	Big Data and AI Driven
Performance indicator	certificate pass rate (92%)	Regional employment rate (68%)	Order conversion rate (7.2%)
Reproducibility Challenge	Enterprises Participate in Cultural Differences	ASEAN Countries' Policy Fluctuations	Shortage of Small Language Teachers

Significant differences in core technologies: service talents in China.

Germany relies on standardized training equipment to ensure skill standardization; The China ASEAN Center supports regional language services through a multilingual database; Small language+e-commerce projects are centered around big data and AI technology, driving cross-border e-commerce operations and language service optimization (such as AI assisted translation and consumer behavior analysis).

The performance indicators reflect different orientations: Germany verifies the standardization level of skills with a certificate pass rate (92%); The China ASEAN Center focuses on the regional employment rate (68%), which reflects the degree of localization and adaptation of talents; The economic benefits of industry education integration are directly quantified by the order conversion rate (7.2%) for small language+e-commerce projects, which is significantly higher than the industry benchmark.

On the level of replicability challenge: Germany faces cultural differences in corporate participation (such as a participation rate of only 37% for Chinese small and medium-sized enterprises); The China ASEAN Center is subject to policy fluctuations among ASEAN countries; Small language+e-commerce projects are limited in scale promotion due to a shortage of small language teachers, and the bottleneck needs to be alleviated through "dual teacher" teacher training or AI technology.

In summary, the three types of cases reveal the diverse practices of industry education integration from the perspectives of subject collaboration, technology driven paths, effectiveness verification dimensions, and localization challenges, providing differentiated references for the cultivation of foreign language

7. Countermeasures and Suggestions

7.1 Build a "Four Helix" Collaborative Education Mechanism, Strengthen Policy Incentives and Institutional Guarantees

Firstly, optimize policy incentive mechanisms to stimulate the vitality of enterprises, schools, governments, and research institutions, and jointly promote the development of education. Suggest revising the Vocational Education Law to clarify the tax preferential policies for enterprises in the integration of industry and education, such as value-added tax reduction and training cost subsidies. Promote the "credit bank" system, incorporate enterprise practice projects into the higher education credit system, encourage cooperation between enterprises and universities to develop courses, and ensure that students receive education and training that matches market demand. Secondly, establish a four party linkage platform of "government school enterprise action" to promote resource integration and sharing, and jointly promote regional economic prosperity and talent cultivation. The Ministry of Commerce and the Ministry of Education guided the establishment of the "the Belt and Road" language service industry education integration alliance, integrated industry association resources, formulated the "Cross border Language Service Competency Standards", enterprises provided a list of job needs, and colleges and universities targeted training of versatile talents.

7.2 Refactoring a Demand-oriented Curriculum System to Promote Deep Integration between Interdisciplinary and Technological Fields

Develop modular "language+technology"

courses aimed at designing and implementing a series of modular "language+technology" courses to meet the specific needs of different industries for professional talents. The course content covers modules such as "Technical Writing and Localization", "Cross cultural Dispute Mediation", and "Application of AI Assisted Translation Tools". By introducing real enterprise cases, it strengthens the combination of theoretical knowledge and practical operation. At the same time, we will build a digital resource sharing platform that integrates various teaching resources such as online courses, instructional videos, e-books, and simulation training software to meet the needs of different learners. Collaborate with enterprises to build multilingual corpora, use LSTM neural networks to predict regional language demand, and dynamically adjust the enrollment scale of small languages.

7.3 Innovate the "Light Asset" Cooperation Model, Break through the Bottleneck of Resources and Teaching Staff

Implement the "data donation+resource exchange" school enterprise cooperation strategy, encourage enterprises to adopt the form of "data resource equity", reduce financial burden, and promote information sharing and business cooperation. Enterprises contribute data resources, while universities provide intellectual support in return, such as improving localized copy for enterprises, building a 'corporate mentor cloud platform', and assisting in the development of cross-border projects. Secondly, we will implement the "dual teacher" teacher training program to enhance the practical teaching ability of the teaching staff, ensure that university teachers have at least one year of experience in hanging out in enterprises every five years, introduce enterprise experts as "industry professors", ensure the synchronization of teaching content with industry development, and enhance students' employment competitiveness.

7.4 Improve the "Full Chain" Evaluation System to Ensure Closed-Loop Management of Training Quality

Construct a multidimensional capability evaluation index system, based on the "social benefits" framework, to evaluate talent quality from three dimensions: language ability, technological application, and cultural

adaptation. Introduce economic indicators in enterprise operations, such as "order conversion rate" and "project delivery cycle", to quantify the effectiveness of industry education integration. Establish a dynamic feedback adjustment mechanism and build a dynamic feedback adjustment system based on real-time data and user feedback. The university curriculum committee updates course settings based on feedback information. For example, data analysis shows an increasing demand in the field of legal translation, and universities have immediately added relevant professional courses to alleviate the shortage of talent.

8. Research Conclusion

This study theoretically verifies the applicability of the "four helix" model in the field of foreign language education, and identifies "policy enforcement", "data mobility", and "cultural embeddedness" as key elements of industry education integration. The research has broken through traditional theories and provided a new framework for cultivating language service talents. In practice, research has shown that the "order+project" model can increase the starting salary of graduates by 32% and job competency satisfaction by 82%; The combination of AI corpus and virtual training can shorten the training period for short language teachers by 40%. The proposed strategies such as "light asset cooperation" and "dynamic capability matrix" provide replicable solutions to address issues such as insufficient enterprise participation. At the policy level, the study proposed institutional innovations such as "vocational education tax" and "data resource equity" to promote the docking between the Vocational Education Law and the construction needs of the "the Belt and Road", and realize the close integration of vocational education with national strategies. The constructed "demand supply capacity" three-dimensional analysis model provides decision-making tools for related departments, helping to more accurately grasp market demand, optimize resource allocation, and enhance the pertinence and effectiveness of talent cultivation.

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