

Analysis of Solutions to the Problems Existing in the Introduction of Talents by Universities in Dalian

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Abstract

Talents are the core element of universities' core competitiveness and the key support for Dalian to build a regional scientific and technological innovation center. At present, although Dalian has abundant higher education resources and policy reserves, the introduction of talents by local universities still faces practical difficulties such as imbalance between supply and demand, insufficient retention support, and imperfect innovation ecosystem. Based on the policy practices of Dalian's science and technology, education and other departments as well as the current situation of talent development, this paper systematically analyzes the core problems in talent introduction, and puts forward targeted solutions from three dimensions: precise talent introduction, talent retention through ecosystem improvement, and talent cultivation through mechanism optimization, so as to provide reference for optimizing the construction of talent teams in Dalian's universities.

Keywords

Universities in Dalian; Talent Introduction; Policy Optimization; Industry-Talent Integration; Service Guarantee.

1. Introduction

As an important education hub and opening-up gateway in Northeast China, Dalian has gathered a number of high-level universities and scientific research institutions, such as Dalian University of Technology and Dalian Institute of Chemical Physics. The number of college graduates in the 2025 session has exceeded 100,000, giving Dalian inherent advantages in talent resources. In recent years, Dalian has achieved remarkable results in talent introduction by implementing initiatives such as the "Xinglian Talent Program" and developing the Yinggeshi Science City. It has invested a total of 182 million yuan to support 519 scientific and technological talent projects, benefiting more than 60,000 talents. However, against the background of the comprehensive revitalization of Northeast China, the introduction of talents by Dalian's universities still has a structural contradiction of "abundant talents but insufficient transformation efficiency", and faces problems such as inaccurate talent introduction, insufficient talent retention stickiness, and inflexible talent utilization mechanisms. Therefore, systematically sorting out these problems and building a long-term solution mechanism is of great significance for Dalian's universities to enhance their core competitiveness and serve the city's industrial development.

2. Core Problems in Talent Introduction by Dalian's Universities

2.1. Mismatch between Supply and Demand: Disconnection between Talent Introduction Orientation and Industrial Needs

Universities in Dalian tend to "value titles over actual needs" in talent introduction, and the research directions of some introduced talents are not closely connected with Dalian's key industrial layout. On the one hand, the disciplinary advantages of universities are concentrated

in fields such as science and engineering, and marine studies, but the talent supply fails to accurately meet the urgent needs of key industries such as equipment manufacturing, clean energy, and life and health. On the other hand, enterprises, as the main entities of talent demand, have low participation. Since 2022, the proportion of scientific and technological talent projects undertaken by enterprises has been only over 30%, and the mechanism for collaborative talent cultivation among industry, university and research institutions has not been fully formed. This leads to the imbalance between supply and demand where "the introduced talents are not applicable, and the urgently needed talents cannot be introduced".

2.2. Weak Retention Support: Deficiencies in Both Hard Security and Soft Environment

Issues such as housing, education, and medical care have become major obstacles to talent retention. Although Dalian has issued a new talent housing policy, providing monthly housing subsidies of 2,500 yuan, 1,500 yuan, and 1,000 yuan respectively for doctoral students, master's students, and undergraduate students, as well as housing vouchers of up to 100,000 yuan, its salary packages and development opportunities are still less competitive compared with first-tier cities. At the same time, there is insufficient sense of urban cultural identity and emotional connection. Non-local talents have a low sense of gain in public services such as household registration application and children's enrollment, and young talents lack a "sense of belonging to the city", resulting in the outflow of some high-level talents and young backbones.

2.3. Lagging Innovation Ecosystem: Unsmooth Talent Utilization Mechanisms and Transformation Channels

The support system for talent innovation and entrepreneurship is not perfect, which restricts the value realization of introduced talents. In terms of scientific research incentives, the protection of intellectual property rights is insufficient. Although relevant regulations have been promoted for legislation, the profit distribution mechanism for achievement transformation has not been fully rationalized. In terms of platform support, although innovation carriers such as Yinggeshi Science City are under construction, the number of national-level innovation platforms is relatively small, and the service capabilities of pilot test bases and technology transfer institutions need to be improved. In 2024, there were only 36 technology transfer service institutions in the city, which is far from meeting the needs of talent achievement transformation. In terms of evaluation mechanisms, the inertial thinking of "valuing only papers and professional titles" still exists, and the weight of evaluating talents' industrial contribution is insufficient, which affects the vitality of talent innovation.

2.4. Insufficient Coordination between Introduction and Cultivation: Fault in the Gradient Construction of Young Talents

Universities tend to "value high-end talents over young talents" in talent introduction, and the cultivation system for young scientific and technological talents is not sound. Although Dalian has built a gradient cultivation system for young talents aged 30, 35, and 40, policy resources are more inclined to top talents and leading talents, and the support for outstanding young scientific and technological talents is limited. In addition, the career development channels for young talents are not smooth. At the same time, the university-local government collaborative cultivation mechanism is not perfect, and the cooperation with universities such as Peking University has not been fully transformed into local young talent reserve advantages, resulting in a need to improve the retention rate of young students in Dalian.

3. Solutions to Talent Introduction by Dalian's Universities

3.1. Build a Precise Talent Introduction System: Achieve Efficient Connection between Supply and Demand Sides

Establish a talent supply and demand data platform. Integrate data on university disciplinary resources, graduate flow, and key industrial gaps to build a dynamic "talent map", which marks advantageous supplies in science and engineering, marine economy, etc., and demand hotspots in intelligent manufacturing, marine engineering, etc., to intuitively show the supply-demand mismatch. Relying on the city's smart talent service platform, provide precise services such as policy promotion, position matching, and project matching.

Implement industry-oriented talent introduction plans. Focus on key fields such as the new generation of information technology, clean energy, and life and health, and jointly set up the "Special Project for Urgently Needed Talents in Industries" with enterprises. Adopt the "list-based recruitment" model to attract high-level talent teams. Provide research project funding of up to 5 million yuan for urgently needed talents introduced by enterprises in cooperation with universities, so as to increase enterprises' enthusiasm for talent introduction and utilization.

Create a university-local government collaborative talent introduction carrier. Deepen cooperation with local universities such as Dalian University of Technology, expand the scale of joint training of engineering masters and doctors, and promote more than 30 key enterprises to participate in the whole process of talent cultivation. Launch the "Study and Research in Dalian" activity, organizing students from non-local universities to visit industrial parks and scientific and technological innovation platforms, so as to achieve "attraction through knowledge".

3.2. Improve the Talent Retention Mechanism through Ecosystem: Strengthen Both Guarantee and Emotional Connection

Optimize life service guarantees. Expand the coverage of the talent housing policy, extend housing subsidies and housing purchase support policies to young teachers, and implement the provident fund loan quota policy of 600,000 yuan for individuals and 1 million yuan for couples. Establish a "talent service specialist" system to solve needs such as household registration application, children's enrollment, and medical green channels in a one-stop manner, so as to reduce the living costs of talents.

Enhance the sense of urban emotional identity. Take the integration of culture and tourism as a link, plan the "Graduation Season · Dalian Employment Experience Tour", and organize college graduates to visit key enterprises while touring coastal scenic spots and historical and cultural venues. Produce "vlogs of young talents' life in Dalian" on short video platforms to promote the city's development achievements and talent stories, and enhance talents' sense of belonging.

Build a "four-party linkage" support network. Establish a collaborative mechanism among the government, universities, enterprises, and families. Through parent meetings, enterprise open days, and other forms, convey Dalian's industrial prospects and talent policies to parents, and win family support for young talents to stay in Dalian, forming a joint force for talent retention.

3.3. Optimize the Talent Utilization and Innovation Ecosystem: Activate the Vitality of Talent Development

Strengthen the support of innovation platforms. Accelerate the full operation of Yinggeshi Science City, promote the construction of major scientific and technological infrastructure such as advanced light sources, strive to have more than 10 national-level innovation platforms, form a group of more than 500 laboratories, and gather more than 3,500 high-end talents. Increase investment in the construction of pilot test bases, and provide subsidies of up to 5 million yuan

(covering 50% of the cost) for newly added scientific research facilities to promote the transformation of achievements from laboratories to industries.

Improve the incentive and transformation mechanism. Implement the special reward policy for intellectual property rights, provide heavy rewards for projects winning the China Patent Gold Award, and improve the profit-sharing mechanism for scientific and technological achievement transformation. Expand the scope of subsidies for technology transfer institutions, and provide rewards of up to 300,000 yuan (accounting for 5% of the transaction volume) for institutions that facilitate achievement transformation, so as to promote the local transformation of scientific and technological achievements in universities and research institutes.

Innovate the talent evaluation system. Establish a dual evaluation standard of "scientific research contribution + industrial benefits", reduce the weight of papers and professional titles in evaluation, and include achievement transformation income and enterprise cooperation projects into evaluation indicators. Implement "long-term evaluation" for young scientific and technological talents, and provide more tolerance for scientific research mistakes.

3.4. Improve the Gradient for Young Talent Cultivation: Consolidate the Foundation of Talent Reserve

Increase support for young talents. Raise the proportion of funding for young scientific and technological talent projects, expand the number of supported young talents aged 30-40, and provide 300,000 yuan for outstanding young scientific and technological talents and 100,000 yuan for young science and technology stars for research and development. Implement the "Young Teachers Growth Program" to accelerate their ability improvement through the tutorial system and temporary training.

Create a carrier for innovation and entrepreneurship cultivation. Host high-level university student innovation and entrepreneurship competitions, and provide 50 square meters of free venues for one year for teams that win awards and register enterprises in Dalian. Build concept verification centers and entrepreneurship incubation platforms to provide full-chain services such as financing connection and tutor guidance for young talents.

Deepen university-local government collaborative talent cultivation. Promote the "Special Action for Young Students to Come to and Stay in Dalian - University Tour", organize key enterprises to conduct promotion and recruitment in universities inside and outside the province, and attract more college graduates to stay in Dalian to teach or engage in scientific research work.

4. Conclusion

The talent introduction work of Dalian's universities is in a critical stage of transformation from "policy attraction" to "ecological agglomeration", facing multiple challenges such as supply-demand mismatch, weak retention support, and lagging innovation ecosystem. To solve these problems, it is necessary to build a full-chain mechanism of "precise talent introduction, talent retention through ecosystem, dynamic talent utilization, and systematic talent cultivation": achieve precise matching through supply-demand data connection and industry-oriented talent introduction; enhance retention stickiness through the optimization of life guarantees and emotional connection; activate the vitality of talent utilization with the help of platform construction and mechanism innovation; and consolidate the foundation of young talents through gradient support and collaborative cultivation. Only in this way can Dalian transform its advantages in higher education into talent advantages, and provide solid support for the high-quality development of universities and the cultivation of new productive forces in the city.

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