

# Research on the Aggregation Approaches and Effects of High-level Talents in Local Colleges and Universities

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**Abstract:** High-level talents are crucial factors in cultivating high-quality scientific and technological achievements and enhancing the core competitiveness of universities. Formulating strategies for aggregating high-level talents in universities that achieve "attracting talents, retaining talents, utilizing talents fully, and matching talents to suitable roles" has become pivotal in institutional competition. Therefore, to address inherent challenges in talent acquisition and stabilize the high-level talent pool, local universities, besides optimizing the macro-environment for talent aggregation, need to construct a paradigm for long-term development characterized by "strategic resource allocation and diversified symbiotic approaches".

**Keywords:** local colleges and universities; high-level talents; Paradigm; talent aggregation; talent retention

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## 1. Introduction

The Optimization Reform Plan for the Adjustment of Disciplines and Majors in General Higher Education issued by the Ministry of Education in 2023 aims to promote the high-quality development of higher education, further optimize the structure of disciplines and majors, and better serve and support China's modernization. Hunan Province has implemented the Implementation Plan for the Layout Optimization of Higher Education Institutions in Hunan Province and the Implementation Plan for the Discipline and Major Optimization of Higher Education Institutions in Hunan Province (collectively referred to as the "Dual Optimization Plans"). These plans focus on optimizing the layout of Hunan's higher education institutions, including integrating resources to build high-level universities, consolidating and optimizing homogeneous institutions, normal universities, and resources from universities, research institutes, and independent colleges. Regarding discipline and major optimization, the plans implement initiatives such as the "Double First-Class" and "Double High-Level" construction plans, support plans for disciplines (professional clusters) underpinning leading industries, and development plans for disciplines and majors urgently needed by industries. These significant reform measures aim to strengthen advantageous disciplines and majors, achieving synergy between disciplines/majors and industrial chains, talent chains, and innovation chains. To achieve this strengthening and expansion of advantageous disciplines and majors, high-level talents constitute a fundamental precondition.

As vital forces for regional economic development and technological innovation, the aggregation of high-level talents is crucial for the development of local universities. Many local application-oriented universities face practical dilemmas in attracting high-level talents, primarily manifested in difficulties in recruitment and high turnover rates; structural gaps and weakened competitiveness; an emphasis on recruitment over cultivation; and a focus on immediate needs over long-term foresight. Reasons for talent outflow from local application-oriented universities include external factors like unfavorable geographical location, regional imbalances in higher education development, and local government economic conditions; internal factors like insufficient funding, inadequate systems, and poor management; as well as personal reasons among high-level talents themselves, such as pursuing self-actualization and the mindset of “finding a job first then choosing a career later.” To effectively address the dilemma of talent outflow and enhance the stability of the high-level talent pool, local application-oriented universities need to establish policy systems that invigorate high-level talents, consolidate talent team building, optimize the macro-environment for talent aggregation, and establish long-term management systems for high-level talents.

## 2. Research Trends on High-level Talent Aggregation

### 2.1. Review and Trends of Domestic Research

Current research on the aggregation of high-level talents in universities primarily focuses on the following aspects: First, research from a value perspective, examining talent recruitment based on project-oriented and market-oriented goals, comprehensively improving talent development environments and platforms, and optimizing talent management (Xiao Yi, 2022; Li Caisen, 2020)<sup>[1-2]</sup>. Second, research on evaluation and assessment, aiming to mitigate various risks inherent in the recruitment process and reduce unnecessary losses incurred by universities (Zhang Zhongyuan, 2020; Shi Jun, 2017; Wang Jianmin, 2019)<sup>[3-5]</sup>. Third, analysis of high-level talent recruitment in specific regions or specific universities, with literature revealing that institutions in different regions and with different orientations face distinct circumstances (Yang Xinchun, 2014; Wu Fan, 2016)<sup>[6-7]</sup>. Fourth, research focusing on specific aspects like compensation incentives or performance evaluation, proposing solutions to problems such as blind recruitment and extensive management (Xu Hui, 2021; Feng Ying, 2017; Tong Feng, 2014)<sup>[8-10]</sup>. Fifth, research emphasizing the cultivation of high-level talents within universities, arguing that recruitment and cultivation should hold equal importance (Li Chengming, 2023; Liu Ying, 2016)<sup>[11-12]</sup>.

### 2.2. Review and Trends of International Research

Erokhina, K.S. analyzed that high-level talents primarily consider salary and other benefits when choosing employment, followed by the availability of a higher platform and opportunities for self-realization<sup>[13]</sup>.

Gleason, through questionnaires and interviews with high-level overseas talents, found that their primary considerations are favorable environmental conditions, good compensation, and development platforms, alongside factors like future career development and interpersonal relationships<sup>[14]</sup>.

Yang, R. and Weich, A.R., via interviews with Chinese students working in Australia, identified that the main reasons for staying are research development opportunities, career prospects, and living conditions/environment<sup>[15]</sup>.

In summary, scholars have researched the aggregation of high-level talents from various perspectives, yielding valuable results. However, some shortcomings persist in the research: ① Existing studies on high-level talent management in universities struggle to reflect the characteristics of different types and tiers of institutions, particularly failing to systematically address the specific weaknesses of local universities located in non-provincial capital cities and propose reasonable aggregation strategies. ② The research findings lack effective solutions to the current situation of “emphasizing recruitment over cultivation.” The disparity in investment between recruitment and cultivation leads to disillusionment among existing faculty, fostering resistance or hostility towards newly recruited talents.

### **3. Approaches to High-level Talent Aggregation**

#### **3.1. Government Level**

Local governments should prioritize the development of local universities and increase investment in higher education resources. On one hand, local governments should introduce specialized policies for attracting high-level talents, extending the benefits of these policies to talents recruited by universities, thereby improving their compensation. On the other hand, based on regional economic development needs, governments should leverage their leading role, strengthen government-university-industry (GUI) collaboration, shifting the talent strategy from “recruitment-centric” to a comprehensive approach of “recruitment, cultivation, utilization, and retention”. This involves building seamless bridges connecting the lectern with the workshop, and the classroom with the production floor – integrating theory and practice. For instance, the Hengyang Municipal Government in Hunan implemented a program guided by the principle of “complementary advantages, resource sharing, and mutual benefit.” This “One Doctor, Two Services, Three Benefits, Four Talents” initiative resulted in the recruitment of 1,298 doctoral graduates between 2021 and 2024.

#### **3.2. University Level**

Local universities need “vision to identify talent, effective methods to gather talent, sincerity to value talent, magnanimity to cherish talent, and courage to utilize talent” in attracting high-level talents. Specific approaches include:

##### **3.2.1. Formulating Sustainable High-level Talent Aggregation Plans**

Aggregating high-level talents is a systematic, long-term project requiring strategic planning for effective implementation. When formulating plans, local universities must first align with regional economic development directions and the institution’s overall positioning, fully considering disciplinary strengths, types of talent needed, and talent echelon development, to implement recruitment plans systematically. Secondly, adopt a “Five Concurrent” talent aggregation model: “Equal Emphasis on Recruitment and Cultivation, Combination of Targeted and Non-targeted Training, Simultaneous Internal and External Recruitment, Blending Rigid and Flexible Recruitment, Employing Full-time and Part-time Staff.” This optimizes the faculty structure by valuing both external recruitment and the professional development (e.g., doctoral degree attainment) of existing faculty, fostering a virtuous cycle. Training for existing faculty can utilize both targeted (specific institutional needs) and non-targeted (individual development) modes. Recruiting international high-level researchers enhances the team’s international perspective and foresight. Flexible recruitment of high-level experts rapidly strengthens the talent pool. Employing part-time researchers through platforms and projects supplements the high-end talent pool, continuously elevating its overall quality.

##### **3.2.2. Enhancing Precision in Talent Acquisition and Improving Personnel Management Systems**

Compared to universities in provincial capitals, local universities in non-capital cities face significantly higher costs in attracting high-level talents. Therefore, recruitment must be precise, based on the university’s specific needs and development goals. Concurrently, relevant personnel management systems, including performance pay, promotion, contracts, and training, need refinement. Performance pay should implement a “more pay for more work, better pay for better work” principle to improve compensation, stimulate research potential, and enhance output quality. Promotion policies should move beyond seniority-based evaluation, setting scientific and reasonable criteria for each level, and providing “green channels” for high-level talents with significant achievements. Regarding political treatment, high-level talents should be prioritized in position assignments and promotions, participation in institutional decision-making, access to information, and recognition/awards, ensuring their rights are protected and their compensation is favorable.

##### **3.2.3. Strengthening Discipline Development and Organized Research**

For local universities, the driving force for attracting high-level talents lies not only in “hardware configuration” but also in compatible “software.” “Software” specifically refers to the platforms necessary for talent development: Firstly,

disciplinary strength is essential. Disciplinary strength is a key indicator of a university's overall capability and academic standing and serves as an endogenous driver for aggregating high-level talents, who increasingly prioritize long-term personal development and the disciplinary progress of their host institution. Secondly, team strength is crucial. Scientific research in universities is no longer an individual endeavor but requires interdisciplinary teams to achieve efficient and diverse research outputs. Thirdly, scientific and technological achievement incubators are vital. Universities must proactively engage with local enterprises and industries, enhance the capacity of research teams for technical cooperation and services, and act as a vital force to transform "research blooms" into "industrial fruits," facilitating the entire chain of technology transfer and commercialization.

#### **3.2.4. Enhancing Humanistic Care and Creating a Supportive Environment**

In the process of recruiting and utilizing high-level talents, local universities need to employ "emotional retention" alongside "retention through career development" and "retention through competitive compensation." Providing humanistic care, such as transitional housing, assistance with children's schooling, spousal employment, and prioritized healthcare, helps talents "work with peace of mind." Offering tuition subsidies and substantial scholarships for in-service faculty pursuing doctoral degrees enables them to "pursue advanced studies confidently." Furthermore, leveraging emotional ties like hometown sentiment when recruiting external high-level talents can motivate them to actively contribute to local development while conveniently caring for family, allowing them to "work comfortably."

### **3.3. Enterprise Level**

In the process of attracting high-level talents, enterprises need to transform from passive policy recipients into active engines for talent acquisition. This can be achieved through triple drivers: Mechanism Innovation (Autonomous Evaluation + Flexible Compensation), Resource Integration (University-Industry Collaboration + Platform Co-construction), and Ecological Cultivation (Career Growth + Cultural Integration), achieving deep integration between high-level talent value and enterprise development. Regarding mechanism innovation, enterprises should ensure recruitment aligns with corporate strategy and implement performance-based contract compensation for talents on secondment. Strengthening collaboration with universities on talent sharing and platform co-construction promotes the model of "seeking utilization, not necessarily ownership" of high-level talents (e.g., joint recruitment where personnel affiliation remains with the university, but the talent serves enterprise R&D and innovation). To encourage high-level talents to engage in frontline practice, enterprises should provide ample career growth opportunities and resources, strengthen corporate culture promotion and development, and create an ecological "strong magnetic field" to enhance talent "belongingness."

## **4. Conclusion**

Through policy support, academic environment optimization, compensation enhancement, and the co-construction of university-industry talent-sharing platforms, local universities can effectively aggregate high-level talents. The aggregation of such talents not only elevates research standards and discipline development but also enhances social service capabilities and talent cultivation quality, playing a significant role in advancing local universities and contributing to regional economic development.

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## References

- [1] Xiao Yi, Wang Cheng. Talent Recruitment Strategies for Application-Oriented Undergraduate Universities under the Integration of Industry and Education [J]. Education Teaching Forum, 2022(01): 161-164.
- [2] Li Caisen. Dilemmas and Breakthroughs in Talent Recruitment at Local Universities [J]. Journal of North China University of Science and Technology, 2020, 20(06): 45-48.
- [3] Zhang Zhongyuan. Risk Analysis and Prevention Avoidance in University Talent Recruitment [J]. Education Teaching Forum, 2020, 48(11): 345-346.
- [4] Shi Jun. Analysis on the Construction of Scientific Indicators for Evaluating University Talent Recruitment [J]. Heilongjiang Researches on Higher Education, 2017(03): 105-107.
- [5] Wang Jianmin, Kang Junhui, Wang Jie. Evaluation Analysis of Talent Development Environment Based on AHP Model---Taking Guizhou Province as an Example [J]. Journal of Guizhou University of Finance and Economics, 2019(01): 103-110.
- [6] Yang Xinchun, Sun Huafeng. Rational Thinking on High-level Talent Recruitment in Provincial Universities outside Provincial Capitals---A Case Study of University A in Southern Jiangsu [J]. Journal of Yunnan Minzu University (Philosophy and Social Sciences Edition), 2014(03): 156-160.
- [7] Wu Fan. Research on the Historical Evolution and Development Direction of Talent Recruitment Policies in Western Universities [J]. Guangxi Social Sciences, 2016(01): 35-38.
- [8] Xu Hui. Construction of Evaluation and Incentive Mechanisms for High-level Talent Recruitment in General Local Universities [J]. University, 2021(01): 137-139.
- [9] Feng Ying, Zhang Hongyi. Construction of Performance Evaluation Index System for Special Funds in Local Normal Universities---Based on the Balanced Scorecard Perspective [J]. Friends of Accounting, 2017(19): 118-121.
- [10] Tong Feng, Xia Quan, He Wanning. Research on New Internal Conflicts in Universities Triggered by High-end Talent Recruitment---Taking University G as an Example [J]. Gansu Social Sciences, 2014(03): 166-169.
- [11] Li Chengming, Zeng Tao, Yu Laisi. Research on High-level Talent Recruitment in Science and Engineering Universities under the Reform of Talent Evaluation Mechanisms [J]. Technology Wind, 2023(04): 166-168.
- [12] Liu Ying, Meng Chaoyin. Summary and Reflections on High-level Talent Recruitment Work [J]. China University Faculty Research, 2016(02): 42-44.
- [13] Erokhina, K.S. Scientists' Social Mobility and Problems of Its Regulation by the State [J]. Russian Education and Society, 2009, 51(12), 9-23.
- [14] Gleason T.P. The overseas-experienced American adolescent and patterns of worldmindedness [J]. Adolescence, 1973, 8(32): 481-490.
- [15] Yang, R. and Weich, A.R. Globalization, transnational academic mobility and the Chinese knowledge diaspora: the case of Melbourne University [J]. Discourse: Studies in the Cultural Politics of Education, 2010, 31(5): 593-607. (Note: Corrected journal name and year/volume based on common citation for this title/author)

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