



Research on the Reform of Talent Evaluation of Organized Scientific Research Team in Colleges and Universities

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Abstract. At present, scientific research activities in colleges and universities are highly valued. As an important force to promote scientific progress and technological innovation, the rationality and effectiveness of the talent evaluation mechanism of scientific research teams in colleges and universities are directly related to the innovation ability of scientific research teams and the quality of scientific research results. This study focuses on the difficulties and pain points of the talent evaluation mechanism of scientific research teams in colleges and universities, and puts forward feasible reform directions and challenges. It aims to explore how to effectively reform the current talent evaluation system of organized scientific research teams in colleges and universities, so as to better stimulate the potential of scientific research personnel and improve the overall effectiveness of scientific research teams, so as to adapt to the rapid development and change of scientific research environment and social needs.

Keywords: talent evaluation, university research team, system reform

1 INTRODUCTION

At present, the talent evaluation of scientific research team in colleges and universities has become a hot issue, and the reform of scientific research talent evaluation has also been referred to the height of implementing the national innovation-driven development strategy. However, there are still some limitations in the current evaluation mechanism, which is mainly reflected in the excessive reliance on quantitative indicators. This 'quantity-only' tendency is difficult to comprehensively and objectively reflect the true contribution and innovation ability of scientific researchers^[1]. At the same time, the comprehensive evaluation system for the overall performance of individuals and teams is not yet perfect. Ignoring the long-term, complex and collaborative nature of scientific research work may induce researchers to pursue short-term visible results, ignoring the depth and breadth of scientific research exploration and the essential pursuit of innovation quality. Therefore, it has become an important issue to be solved urgently to deepen the reform of talent evaluation mechanism and build a diversified evaluation system that can not only stimulate scientific research

innovation but also promote teamwork. This is not only related to the improvement of the overall efficiency of the scientific research team, but also the key to promoting the high-quality development of scientific research in colleges and universities.

2 LIMITATIONS OF THE CURRENT EVALUATION SYSTEM

The talent evaluation of scientific research team in colleges and universities has always been the focus, difficulty and hotspot in the field of university reform. The scientific talent evaluation system can not only promote the rapid transformation of scientific research results, but also make the scientific research management of colleges and universities scientific and standardized^[2]. Although the research on talent evaluation in some universities is relatively rich, the research on the talent evaluation index system of scientific research team is still not perfect, and there are mainly the following four limitations:

2.1 Excessive Emphasis on Quantitative Indicators

Quantitative indicators, such as the number of papers published and the impact factor of journals, have become the core yardstick for the performance evaluation of scientific researchers. However, the evaluation system that relies too much on quantitative indicators has also brought many problems that cannot be ignored. In the process of pursuing the number of papers and the influence of journals, researchers may fall into the whirlpool of 'publication paradox', and choose rapid output rather than deep mining, resulting in uneven quality of some scientific research results, and even the proliferation of low-quality papers, which will undoubtedly lead to a significant reduction in its scientific research value^[3]. At the same time, the scale of quality and quantity is also quietly unbalanced. In order to achieve quantitative goals, researchers often have to sacrifice the depth and breadth of research, which makes many topics that should be explored in depth tasted, and it is difficult to form significant scientific research results. Moreover, the single evaluation standard ignores the diversity and complexity of scientific research activities, limits the possibility of researchers exploring new fields and methods, and constrains the pace of scientific research innovation. Therefore, colleges and universities need to re-examine and optimize the scientific research evaluation system to evaluate the contribution and value of scientific research personnel with more comprehensive and objective standards.

2.2 Ignoring Non-Quantitative Indicators

The actual value of scientific research contribution is not equal to the performance level of scientific research personnel, but determined by other standards^[4]. The current evaluation system often ignores non-quantitative indicators such as innovation, insight, research integrity, teamwork and leadership of researchers. First of all, the lack of innovation is not only reflected in the lack of evaluation of original achieve-

ments, but also in the failure to effectively motivate researchers to break through the traditional framework and explore unknown fields, thus limiting the speed and depth of scientific research progress. Secondly, as one of the key factors for the success of scientific research, the importance of teamwork is often marginalized in the current evaluation system, and there is a lack of effective evaluation mechanism to recognize and strengthen the collaborative efforts and complementary advantages within the team, which in turn affects the overall effectiveness and sustainability of scientific research projects. Furthermore, as the cornerstone of guaranteeing academic purity and credibility, the maintenance mechanism of scientific research integrity is particularly weak under the guidance of excessive pursuit of quantitative results, which not only promotes the breeding of academic misconduct, but also erodes the trust foundation in the field of scientific research, and poses a potential threat to the long-term development of scientific research. Therefore, it has become an urgent problem to be solved in the field of scientific research management to construct a scientific research evaluation system that is comprehensive, fair and takes into account both quantitative and non-quantitative indicators.

2.3 Confusion of Team and Individual Performance Evaluation

In team scientific research, individual contribution is closely related to the overall performance of the team. The current evaluation system is often difficult to distinguish individual specific contributions due to the ambiguity of contribution. This ambiguity is not only reflected in the inseparability of direct results (such as the number of papers published, patent applications, etc.), but also implied in intangible contributions such as knowledge sharing, innovative thinking stimulation, and team atmosphere creation, which makes the hard work of some individuals easy to be obscured by the overall achievements of the team. In the long run, it will undoubtedly dampen the enthusiasm and creativity of individuals^[5]. In addition, the difficulty of role positioning is also a major challenge. In the team, members may be good at theoretical research and lay a solid foundation for the project; some are good at experimental design and data analysis, and promote research forward; some are responsible for coordinating communication and ensuring the efficient operation of the team. These diverse roles are indispensable for team success, but the current evaluation system often adopts uniform standards, which makes it difficult to fully and accurately reflect the differences and importance between different roles, thus affecting the fairness and scientificity of evaluation. Therefore, it has become an urgent problem to construct a performance evaluation system that can not only reflect the uniqueness of individual contributions, but also take into account the overall effectiveness of the team.

2.4 Underestimation of Long-Term and Interdisciplinary Research

Long-term and interdisciplinary research often requires more time and resources, and the output cycle is longer. The current evaluation system tends to be more inclined to short-term and easy-to-quantify research results. On the one hand, as an important

part of scientific exploration, the value of long-term research often lies in its far-reaching theoretical contribution and practical application prospects. However, such research often encounters cold reception in the evaluation system because of its long output cycle and difficulty in quantitative measurement in the short term, resulting in shortage of funds, brain drain, and even research interruption. On the other hand, interdisciplinary research is an important way to promote knowledge integration and innovation. Its complexity and innovation require researchers to cross the boundaries of traditional disciplines and integrate a variety of theories and methods. However, the current evaluation system is often limited by the evaluation criteria of a single discipline, and it is difficult to comprehensively and accurately evaluate the value and contribution of interdisciplinary research, which makes such research face many challenges in applying for funding and results recognition^[6]. This not only inhibits the enthusiasm of interdisciplinary cooperation, but also hinders the diversified development of the scientific field. Therefore, the establishment of an evaluation system that adapts to the characteristics of long-term and interdisciplinary research has become an urgent need to promote scientific research innovation and promote scientific prosperity.

3 REFORM DIRECTION

In order to establish a more comprehensive, fair and effective scientific research evaluation system, the direction of reform should include the following key points:

3.1 Develop Multi-Dimensional Evaluation Criteria

A multi-dimensional and all-round evaluation standard system is constructed, and multi-standard evaluation is adopted to comprehensively and profoundly measure the value and actual contribution of scientific research talents in colleges and universities^[7]. This system should abandon the shackles of single quantification and integrate multi-dimensional considerations, covering the following core dimensions:

Research Quality and Influence. Strengthen the evaluation of research quality and influence, and ensure the academic authority and international recognition of scientific research results through rigorous peer review mechanism, in-depth consultation of senior experts and extensive international exchange feedback.

Scientific Research Innovation and Originality. Consider the novelty and breakthrough of research in the academic or technical field, encourage researchers to explore unknown fields, propose innovative theories or technologies, and promote the expansion and deepening of discipline boundaries^[8].

Scientific Research Integrity and Ethics. To ensure the standardization of scientific research activities, through the establishment of a strict scientific research ethics re-

view mechanism and create a self-disciplined cultural atmosphere, to ensure that scientific research activities follow scientific norms, maintain the purity and health of academic ecology, effectively curb academic misconduct, and maintain scientific research integrity.

Teamwork and Leadership. The consideration of this ability is also crucial, which is related to the harmonious construction and efficiency improvement of scientific research ecology. By reasonably and effectively evaluating the role and contribution of individuals in the team, the cohesion and innovation ability of the scientific research team can be promoted, including its positive impact on team collaboration and research atmosphere, as well as the ability to lead and coordinate the team.

Knowledge Dissemination and Social Benefits. Investigate the practical application and extensive influence of scientific research achievements outside the academic community, especially the positive role in promoting the development of the industry and solving social problems, so as to highlight the social value and far-reaching significance of scientific research activities. The improvement of this evaluation system will effectively promote the high-quality development of scientific research and contribute wisdom and strength to the progress of society.

3.2 Emphasize the Two-Dimensional Evaluation of Individual and Team.

In the construction of evaluation mechanism, the two-dimensional consideration of individuals and teams should be deeply reflected^[9]. The personal evaluation accurately defines the unique contribution of each member in scientific research, emphasizing the display of their professional ability and innovative thinking; the team evaluation comprehensively examines the team's collaboration efficiency, innovation ability and quality of results, and attaches importance to the complementarity and support among members. This two-dimensional evaluation system complements each other, not only ensuring that personal efforts are recognized, but also promoting the enhancement of team cohesion, and more accurately measuring the contribution and value of each scientific researcher.

3.3 Incentive Long-Term Goals and Interdisciplinary Research

When constructing the evaluation mechanism, we should pay special attention to the potential of encouraging researchers to pursue long-term goals and promote interdisciplinary research. First of all, to build a stable support framework and continuous evaluation mechanism for long-term research projects, aiming at breaking the shackles of short-term results orientation, allowing researchers to deeply cultivate complex scientific problems and promoting the depth and systematicness of scientific research work. Secondly, actively implement the incentive policy of interdisciplinary research, not only through the establishment of special funds and incentive mechanisms to encourage scientific research talents to cross the traditional discipline barriers, but also

introduce the recognition standards of cross-disciplinary achievements in the evaluation system to promote the cross-integration and collaborative innovation of different disciplines, so as to broaden the scientific research vision and stimulate new scientific research growth points^[10].

4 CONCLUSIONS

The reform of the talent evaluation mechanism of organized scientific research teams in universities is a necessary measure for the development of scientific research. By constructing a more fair, comprehensive and flexible evaluation system, this study can not only promote the enthusiasm and creativity of researchers, but also improve the quality and efficiency of scientific research, cultivate more excellent scientific research talents for the society, and promote the progress of scientific research and technological innovation. In the future, with the continuous change of scientific research environment and social needs, the reform of talent evaluation should also continue to iterate and optimize to adapt to the new scientific research trend.

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