

Research on the Path of Interdisciplinary Team Construction in Universities under the Background of Organized Scientific Research

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Abstract: With the rapid development of science and technology, the intersection and integration between disciplines has become the general trend. Universities are an important position of scientific research and innovation, and the construction of their interdisciplinary team plays a vital role in improving the ability of scientific research and innovation, and meeting the major strategic needs of the country. Therefore, to promote organized scientific research, we need to actively pay more attention to the construction of interdisciplinary teams in colleges and universities. Based on this, this paper discusses the path of interdisciplinary team building in universities under the background of organized research, and analyzes the current situation and countermeasures of interdisciplinary team building in universities under the background of organized research. This will provide inspiration and reference for relevant universities to optimize the construction of interdisciplinary teams based on the organized scientific research background.

Keywords: university, organized scientific research, interdisciplinary team, construction path

Introduction

The release of *Several Opinions on Strengthening Organized Scientific Research in Colleges and Universities and Promoting High-level Self-reliance and Self-improvement* will promote the construction of organized scientific research in colleges and universities^[1]. However, some universities have insufficient top-level guidance under the background of organized research; the development is limited; and the evaluation mechanism needs to be improved and the problem of team innovation is insufficient. In this regard, colleges and universities should correctly understand the connotation of the interdisciplinary team and the deficiencies of the current interdisciplinary team construction in colleges and universities, so as to improve the status quo in continuous exploration and improvement, build a high-quality interdisciplinary team, implement the requirements of the Ministry of Education, and help students and the national strategic development.

1. The connotation of the university interdisciplinary team

College interdisciplinary team construction is an innovative team construction based on interdisciplinary cooperation and integration. According to the reality, the growth and development of interdisciplinary teams in universities is deeply rooted in the specific organizational soil of universities, and its growth is closely related to the guidance of education authorities, the support of universities and the practice of interdisciplinary team. This ensures that the team moves forward steadily within the established framework, while also emphasizing the need to combine external guidance with internal innovation. The interdisciplinary team members of universities are closely composed of scientific research workers from different disciplinary backgrounds. They have common pursuits and aim to carry out frontier research by relying on

complementary knowledge^[2]. Intersecting is the core and driving force of this team. The team members will gather all the wisdom and resources to solve complex scientific problems, that is, using different disciplinary methods and thinking methods to produce new research perspectives, theoretical framework and solutions in the process of knowledge integration. From another point of view, the interdisciplinary team of universities is also an important team to cultivate compound innovative talents. The construction of this team can provide opportunities for relevant members to learn interdisciplinary learning, and promote the improvement of their comprehensive quality and innovation ability.

3. Research on the path of interdisciplinary team construction in universities under the background of organized scientific research

From the above content, we can see that the construction of interdisciplinary team in colleges and universities is of great significance. However, under the background of organized scientific research, there are still some difficulties in the interdisciplinary team construction in some universities. Many colleges and universities are faced with the problem of insufficient top-level guidance when promoting the construction of interdisciplinary team, and the construction of interdisciplinary team lacks a clear direction and firm support^[3]. In addition, the construction of interdisciplinary team often requires the support of interdisciplinary communication platform and resources, but many universities have obvious deficiencies in the platform construction. In addition, some colleges and universities have the problem of assessment and evaluation mechanism to be improved and lack of team innovation. For example, these universities still use the traditional single-subject evaluation criteria when assessing interdisciplinary teams, and fail to fully consider the complexity and particularity of interdisciplinary teams. In this regard, the optimization of the interdisciplinary team building path of universities under the background of organized scientific research can be started from the following aspects:

3.1 Optimizing the top-level guidance and ensuring the talent strength

From the above content, we can see that there is a problem of insufficient top-level guidance in colleges and universities. This will not only make the interdisciplinary team lack effective top-level guidance and coordination in resource acquisition, task setting and goal achievement, but also make it difficult for the team to form a solid foundation, and further limit the rapid development and long-term planning of the interdisciplinary team. In this regard, colleges and universities should formulate a clear strategic planning, and bring the interdisciplinary team building into the overall development layout of the university. When necessary, it can also actively seek the support of higher departments, set up a special interdisciplinary steering committee or special committee, gather the wisdom of high-level experts, and scientifically set the scientific research goals and tasks of interdisciplinary teams around the major national needs and "bottleneck" problems. In this process, colleges and universities should strengthen the connection between top-level design and grassroots practice, so as to ensure that the strategic planning can be transformed into concrete and feasible action plans. In terms of talent guarantee, colleges and universities should break down the traditional system barriers, implement a flexible employment mode, attract excellent talents from different disciplines to join the interdisciplinary team, and provide solid talent support for team building.

3.2 Optimizing the platform construction and opening up the team development chain

In order to solve the problem of insufficient platform construction, universities should set up physical or virtual scientific research platforms according to the characteristics and needs of interdisciplinary teams. For teams engaged in basic and original innovation research, materialized frontier cross research institutes can be established to provide long-term and stable research environment and resource support, and for teams engaged in technological breakthroughs and technological breakthroughs, virtual research platform can be set up to flexibly adjust the research direction and resource allocation. In addition, universities should also strengthen the interconnection between platforms, promote resource sharing and collaborative innovation, and provide all-round support and services for the development of interdisciplinary teams. It is worth noting that the improvement of the traditional closed scientific research model is indispensable. To this, the interdisciplinary team based on organized scientific research background to participate in scientific research, should also deepen the cooperation between the industry, the research institutions, by strengthening the

communication mechanism, effectively alleviate the information asymmetry problem in the field of information technology, at the same time to optimize the intellectual property protection measures, to ensure the legitimacy and maximize the value of scientific research achievements, and enhance the overall efficiency of scientific research work. In addition, colleges and universities should make full use of the richness of their own talent resources, promote the integration of interdisciplinary research, accelerate the integration and optimal allocation of internal resources, and open up the development chain of interdisciplinary team.

3.3 Optimizing the assessment and evaluation mechanism to promote the continuous innovation and development of the team

At present, some universities have the problem of imperfect evaluation and assessment mechanism when building interdisciplinary teams under the background of organized scientific research, which will lead to the lack of clear guidance and incentive in the scientific research direction and achievement identification, and the innovation enthusiasm of team members and the overall innovation ability of the team will also be negatively affected. In this regard, colleges and universities should actively explore the assessment and evaluation system in line with the characteristics of interdisciplinary scientific research, and set up scientific and reasonable assessment indicators, so as to comprehensively evaluate the scientific research achievements and innovation ability of the team. In order to change the traditional single-subject evaluation standard, universities should also pay attention to the contribution of teams in interdisciplinary cooperation and knowledge innovation. In terms of the implementation of incentives, colleges and universities should give incentives according to the different activities and completion of different teachers, so as to achieve the important goal of using incentives to promote the academic level of teachers compared with the international high-level academic achievements. For example, when the scientific research activities participated by the interdisciplinary team produce certain economic and social benefits, the economic income of the team members can be directly linked to the generated benefits generated. In addition, it is essential to establish a "school-team-individual" three-level assessment system. Combining team assessment with individual assessment can effectively encourage team members to actively participate in interdisciplinary research and promote the continuous innovation and development of the team. University interdisciplinary research teams should take the initiative to adopt strategies to optimize the allocation and management of scientific research positions. To be specific, according to the specific responsibilities and expertise of teachers, the team can carefully divide the teaching positions, pure scientific research positions and both teaching and scientific research positions. Subsequently, according to the characteristics of each position, the job responsibilities are clearly defined, and the corresponding promotion path and professional title evaluation standard system are set up. In short, the implementation of scientific and reasonable assessment and incentive mechanism to ensure that the evaluation process is fair and transparent, and can effectively encourage teachers to choose the most suitable positions for their own through fair competition according to their personal ability and interest. In this way, the interdisciplinary group of colleges and universities can not only play their own positive role as a teacher, but also to ensure their own smooth participation in the scientific research work. Such adjustment will not only help to improve the overall effectiveness of the team, but also promote the diversification and specialization of teachers' personal career development.

4. Conclusion

To sum up, the lack of top-level guidance in some universities, interdisciplinary team development, the assessment and evaluation mechanism need to be improved, and team innovation is insufficient. Universities and scientific research cross-over teams need to actively take certain measures to improve them. If we want to optimize the construction path of interdisciplinary team in universities under the background of organized scientific research, we can optimize the top-level guidance, guarantee the strength of talent, optimize the platform construction, open up the development chain of interdisciplinary team, optimize the assessment and evaluation mechanism, and promote the continuous innovation and development of the team.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

[1] Lin Lu, Jin Duowei, Zhou Haifeng. Analysis of the path of interdisciplinary team building in universities under the background of organized scientific research [J]. China's Technology Industry. 2023; (6): 53-55.

[2] Cao Yuan, Kong Fei, Zhang Xiaoyi, et al. Thoughts on the organized scientific research in universities in the field of medicine and health [J]. China Engineering Science. 2023; 25(5): 72-80.

[3] Zhang Juan, Xun Zhifang. The connotation, characteristics and implementation path of organized scientific research in colleges and universities [J]. Research on Higher Engineering Education. 2023; (6): 99-104.

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