Innovation and Efficiency of Scientific Research Management in Colleges and Universities

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Abstract: As an essential component of the administrative department in college, the scientific research administrative organization plays an important role in scientific research strength improvement. This article analyzed the reasons behind inefficient scientific research administration in college, indicating that to improve scientific research administrative efficiency, attain the objectives for rapid and sustainable development of college scientific research, establish a good system of using and sharing of scientific research resources, it’s essential for colleges to significantly accelerate the transformation of research administration pattern to service-oriented, and make solid connections with enterprises.

1. Introduction

The scientific research management department of a university is a key department responsible for formulating and implementing the scientific and technological development plans of all units in universities and colleges, and undertakes the organization and management of scientific research projects, research funding, and scientific research achievements of the whole university. The school bears the responsibility of formulating, organizing and implementing school scientific research and development plans, managing scientific research resources, and externally as an important window for scientific exchanges between schools and the state, society and other institutions. As the state attaches great importance to scientific research, the growth of scientific research in colleges and universities, the number of scientific research projects undertaken by colleges and universities also increases sharply, putting a lot of pressure on scientific research management. Improving the efficiency of scientific research management has become the key to promote the rapid and sustainable development of scientific research in colleges and universities.

Efficient scientific research and management mechanism can mobilize teachers’ enthusiasm for research within the country and can speed up the conversion of scientific research results from schools to actual productive forces. This is an important guarantee for improving the overall scientific research level of the country and strengthening the scientific research capability of schools.

2. Hinder the improvement of scientific research management efficiency of the main issues

2.1 The transition to service-oriented research and management has not yet completed China’s university scientific research management has entered a period of rapid development is mainly about 30 years of things, affected by the planned economy at that time, the early scientific research management model is the executive-led, this model of scientific research management The clear distinction between personnel and scientific research personnel is the relationship between management and management.

The main work of scientific research management personnel is uploaded, the content of the work is only the declaration of the project, reimbursement of funds, the results of identification and other conventional management work, scientific research management is in a higher level what instructions to do what the work of the passive state, management efficiency low.

News has repeatedly reported that there are semesters in colleges and universities at the end of
the student queuing reimbursement for teachers in the early morning. This is mostly because research projects are generally implemented on a semester, school year, or natural year cycle, and scientific research authorities require reimbursement at the end of the project for management. This has caused no peacetime reimbursement, reimbursement ends up at the end of the problem.

2.2 Research direction and business needs docking is not close enough Some teachers in scientific research, not only to apply for the National Natural Science Fund, provincial and municipal natural funds and other vertical projects, but also applied for some horizontal cooperation projects with enterprises. Most of the fund project is theoretical research. The horizontal project is to cooperate with the business, to make some practical products, or to solve the actual needs of some enterprises. Due to the more adequate funding for horizontal projects, researchers may choose to do research that is not what they are most interested in and may be most interested in, for the needs of laboratory development. And the research they are most interested in may not translate into productivity and bring economic benefits to the lab.

An important task of scientific research management is to convert scientific research achievements into productive forces so that it will have tangible economic benefits and promote the economic development of the country. The most efficient management of scientific research is in the early stages of scientific research, and guide the research direction of researchers, and business or market demand to form a seamless docking. Most research and management departments can not do this yet, which is one of the reasons for the inefficiency of scientific research management.

2.3 Research resources can not be effectively managed and utilized

According to the statistics of the Ministry of Education, the resources for scientific research of colleges and universities in our country are increasing at an annual rate of more than 10%. In 2015, the total construction area of ordinary colleges and universities was 891.4138 million square meters, an increase of 28.3067 million square meters over the previous year.

Some precision instruments failed to timely maintenance, a serious loss of instrument life. Because of the scattered use of funds, leading to the laboratory can only purchase basic equipment, can not buy large-scale equipment, easily lead to duplication of the purchase of laboratory equipment. In recent years, many universities and research institutes to establish the analysis and testing center, but the matching site can only check the equipment, no reservation function; part of the analysis and test center to establish a simple network booking platform, only to achieve device query, test reservation and results download, still can not achieve the expected results.

3. To enhance the efficiency of research management methods

3.1 Accelerate the transformation of service-oriented scientific research management

The transformation of scientific research management mode is not complete. The first is that the transitional period is short, reform and innovation are not successful overnight, and the second is that the mode of thinking of scientific research managers and researchers has not changed from the administrative management mode. To speed up the transformation, we should start from the second reason. In order to establish a service-oriented scientific research management model, scientific research management agencies should enhance their awareness of active management. Scientific research management personnel should change the current scientific research management mode from the perspective of their thinking and change passive management to take the initiative in management. There may be more than one issue in the existing scientific research management system, such as long lines of reimbursement of funds reimbursements. Scientific research agencies should understand the needs of researchers in various aspects and at the same time start with teachers and students. Teachers in charge of scientific research control the general direction, some details of the things that may be left to students to do, the system of defects, such as equipment needs, reimbursement, etc., may not understand better than students.
3.2 To do the most solid bridge between colleges and enterprises

As a window of communication between universities and the outside world, scientific research management agencies have the responsibility to convert scientific research achievements into productive forces. There are many enterprises that need science and technology, and the scope of university research is also very broad. However, not every horse can find Bole. If the information about the achievements of colleges and universities and the demand information of the enterprises can not be known to each other, the achievements in scientific research will be stagnant at the final stage of conversion into productive forces.

The solution to this problem can be inspired by the taxi software and take-away websites that have emerged in recent years. Taking taxi software as an example, many taxi drivers complain that they are always empty and have no passengers, but the same passengers always encounter the embarrassment that they can not hit the car for a long time. This is due to unequal information and time-space barriers. Passengers may be only ten meters behind the driver, but because there is no passenger's location information, the needs of the passengers and the driver's service can not be closely integrated. But with the rise of taxi software, a bridge between drivers and passengers is built, passengers can hit the car during peak hours, and taxis also reduce the number of empty trips.

3.3 To enhance the utilization of scientific research resources in colleges and universities

College research resources include school classroom resources, equipment resources, scientific and technological literature resources, professional and technical resources, human resources, etc., of which equipment and human resources are the important contents of scientific research management in colleges and universities. In the purchase of university equipment management, the feasibility of feasibility studies is the prerequisite for the purchase of equipment, to avoid duplication of equipment purchase, utilization is low, to ensure the use of experimental equipment efficiency. The purchase of equipment, the indicators have a certain forward-looking, comprehensive analysis and reasonable custom purchase of equipment indicators, so that the purchase of equipment with high cost. University equipment management but also to ensure the normal operation of the equipment installation site, the experimental equipment plays an important role in the normal and efficient operation, is to achieve the protection of equipment efficiency. In addition, we should also realize the open sharing of experimental platforms. While ensuring the smooth conduct of teaching and research work in schools, we should establish an open and open operation mode, create economic benefits, and ensure the daily operation and maintenance of public experimental platforms.

4. Conclusion

Although the main work of research management is the application, review and approval of the previous projects; the mid-term project planning, organization and implementation, inspection and supervision and phase summary; the conclusion of the final research work summary, the publication of papers and the promotion of the results of the promotion and management. However, research institutes should not just be content with such mechanical work. Rather, it is necessary to understand the needs of researchers in a down-to-earth manner and take the initiative to provide corresponding services so as to arouse the enthusiasm of scientific researchers to participate in scientific research and management. Establish a good scientific research resources management system to enhance the utilization of scientific research resources and to achieve sharing. At the same time, take the initiative to understand the market demand, research projects to market demand-oriented and improve the market research results of the conversion rate, to achieve the organic combination of production, research and establish a set of efficient scientific research management mechanism to promote scientific research steadily.
References


[4] Lu Yanxia, Huang Hui, Pu Xiaowen, etc. Experimental teaching information management research [J].