Research on the Influencing Factors of University Teachers' Scientific Research Data Demand Management

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Abstract: Scientific Research Achievements Mark the Core Development Strength of a Country. Scientific Research Information Management System Plays an Obvious Role in the Development and Promotion of National Science and Technology. Scientific Research is One of the Core Tasks of Colleges and Universities. in Scientific Research Management, We Must Pay Attention to Teachers' Needs and Stimulate Teachers' Enthusiasm and Initiative to Participate in Scientific Research. the Demand Management of Scientific Research Data in Colleges and Universities is an Important Topic in the Reform and Development of Higher Education in China, Which Provides a Strong Impetus for the Internationalization Process of Colleges and Universities in China. in Order to Promote the Coordinated Development of Teaching and Scientific Research, We Should Reform the Teacher Management System, Create a Good Academic Environment, Broaden the Sources of Research Projects and Strengthen International Exchanges and Cooperation. from the Perspective of Educational Philosophy, the Research Will Focus on the Coordinated Development of Individual and Collective, Local and Overall, and Provide Some New Ideas for the Overall Improvement of the Educational and Scientific Research Level of School Teachers.

1. Introduction

In the Environment of Digital Scientific Research, Scientific Research Data Has Become an Important Strategic Resource. the Demand for Teachers' Scientific Research Level Has Obviously Improved, and Many Students' Demand for Academic Research Guidance Has Posed Severe Challenges to Teaching Staff in Colleges and Universities [1]. At Present, Higher Vocational Education Has Entered the Stage of Connotative Development. Scientific Research in Higher Vocational Colleges Has Not Only Received Attention, But Has Become or is Becoming a Key Factor in Determining the Development Quality of Higher Vocational Education [2]. Grasping the Demand for Scientific Research Data Services is the Primary Premise for Relevant Service Agencies to Carry out Their Work. Looking At the Scientific Research Fields Around the World, Universities Have Become Important Producers of Scientific and Technological Knowledge, Especially Basic Theoretical Research [3]. Because Colleges and Universities Have Good Innovation and Creativity in Basic Research and Common Key Technologies and Other Scientific Research Activities. All-Round Support for Teaching, Scientific Research, Management and Service in Colleges and Universities Has Provided Good Information Support and Service for All Teachers [4]. Understand the Data Management Behaviors and Data Requirements of Scientific Researchers, Understand and Grasp the Status and Gaps of Scientific Data Management, and Formulate Policies and Strategies for Scientific Research Data Management in Universities. Learn New Teaching Concepts and Reflect on Your Teaching Methods as Additional Tasks. Separate Teaching from Teaching and Research, and Put Teaching and Teaching and Research into Primary and Secondary Positions, Respectively. Improving Management Efficiency and Management Level Provides Reference Data and Information to Support Decision-Making Needs, and Has Become an Important Factor in the Construction of University Informatization to Improve Scientific Reesearch [5].

The Milestone in the Development of Scientific Research in Colleges and Universities-Higher Vocational Education Should Not Only Carry out Scientific Research, But Also Do a Good Job in Scientific Research, Which Has Become the Consensus of Most Colleges and Universities At

Present [6]. the Core Position of Teachers is Reflected in That They Are the Sources of Data and the Main Maintainers of These Data, While the Work Responsibilities of Scientific Research Management Personnel in Departments and Colleges Are Mainly Reflected in the Audit and Related Management of Scientific Research Information within Their Jurisdiction, and the Problems Found through the Review and Review of Their Own Teaching Behaviors [7]. There Are Many Methods for Problem Research. for Now, School-Based Research and Reflective Research Are More Common and Realistic Research Approaches [8]. Schools Should Strengthen the Guidance of These Teachers' Scientific Research Behaviors through Rational System Design, Encourage Them to Carry out Research on Scientific Research to Promote Teaching, Realize the "Return" Effect of Scientific Research on Teaching, and Really Straighten out the Relationship between Teaching and Scientific Research. in the Future, the Scientific Research Information Management Information System Will Be Further Integrated and Highly Integrated. through Different Scientific Research Platforms and Other Informatization Platforms, It Will Be Integrated and Related, Thereby Comprehensively Improving the Comprehensive Office Efficiency and Scientific Research Level of Universities [9]. the Research on the Needs Assessment Methods of Scientific Research Data Management in Universities Can Guide and Help the Needs Assessment of Scientific Research Data Management in Colleges and Universities Be Carried out Effectively. Therefore, This Article Has Conducted Research on the Influencing Factors of Scientific Research Data Management in College Teachers [10].

2. General Views on Scientific Research

2.1 The Necessity of Promoting the Overall Improvement of School Teachers' Educational and Scientific Research Level

As the main body of its internal system, colleges and universities must reform the current single teacher management system. By setting up scientific research posts, some teachers with high scientific research level who are interested in contributing to scientific research are separated and specialized in scientific research. The effective cooperation among the research participants to solve the difficult problems in schools and groups is conducive to the breakthrough of the difficult problems. At the same time, research can also bring out a research group and backbone that emphasize team spirit and are good at cooperation and interaction. Set different management authority, each department can maintain and modify the data of its own department, and can use the data of other departments after approval.For example, the educational administration system can read the teacher's job information in the personnel system in real time to ensure the accuracy of the teacher data. For technical research topics, the exploratory and uncertainties of research should be respected, and delayed conclusions and even research failures should be allowed. After the general direction of the research is determined, teachers should be encouraged to innovate and explore based on personal interests and professional abilities.

2.2 The Leading Nature of Scientific Research Development in Colleges and Universities

Considering that there will be differences in the development level of the same research data management elements, we try to find the differences and problems through evaluation, and put forward suggestions that can promote collaborative development. There are still many problems in the demand survey of scientific research data management in Colleges and universities, such as: the target of demand assessment is not clear enough, the content of assessment is not comprehensive enough, the assessment procedure is not scientific enough, and the assessment tools are lack. Take appropriate measures to guide, formulate relevant policies, promote technology transfer and achievement transformation, so that technology inventors can share the benefits of property rights, effectively protect the rights and interests of technology inventors, and stimulate teachers' enthusiasm for technological innovation. We should adhere to advocating science, democratic management and academic freedom, encourage teachers to conduct cooperative research through multiple channels and in multiple aspects, encourage teachers to cooperate with enterprises,

cooperate with other universities and research institutions, cooperate with the government, and expand the sources of projects. The school hires relevant teachers and researchers to do regular guidance; At the same time, the school calls on teachers to give full play to the advantages of their surrounding human resources, and invites out-of-school education experts or excellent teachers to come to the school for irregular guidance and exchange. If appropriate, they can be employed as long-term teaching and research consultants. For managers to achieve basic information management, retrieval and data statistics, for researchers to achieve independent maintenance of information, automatic tracking of scientific research activities, effective matching of scientific research resources in schools and other services.

For ordinary college teachers, in addition to the information of scientific research projects and achievements, other information related to them is also very important. Stakeholders of scientific research data management, such as data creators, managers and technicians, can participate in the evaluation process, and conduct self-evaluation on the basis and capacity of scientific research data preservation. As for the structured outline and template of needs and problems, colleges and universities have the responsibility and obligation to let the state departments know the actual use of management data of colleges and universities, and put forward relevant policy suggestions, which can not only reduce the workload of data submission of the University, but also reduce the workload of data submission of other colleges and universities. The purpose is to understand the data management needs and behaviors of researchers in different disciplines, and to create data management outlines for different disciplines. Reasonable increase in funding for project initiation and support in scientific research facilities, equipment and experimental consumables will enable teachers to actively carry out scientific research and innovation. It is very important to deal with the problem of time and energy distribution between teaching and scientific research. Schools should formulate corresponding policies and measures to overcome and ease the contradiction and conflict between scientific research and teaching in time as far as possible to ensure the interaction between teaching and scientific research. A series of educational problems and difficulties around students, such as moral education, can be studied. Teachers can also explore and verify some educational ideas and even their own educational ideas through school-based research. The leading nature of scientific research development in colleges and universities is shown in Table 1 and Figure 1.

Table 1 the Leading Nature of Scientific Research Development in Colleges and Universities

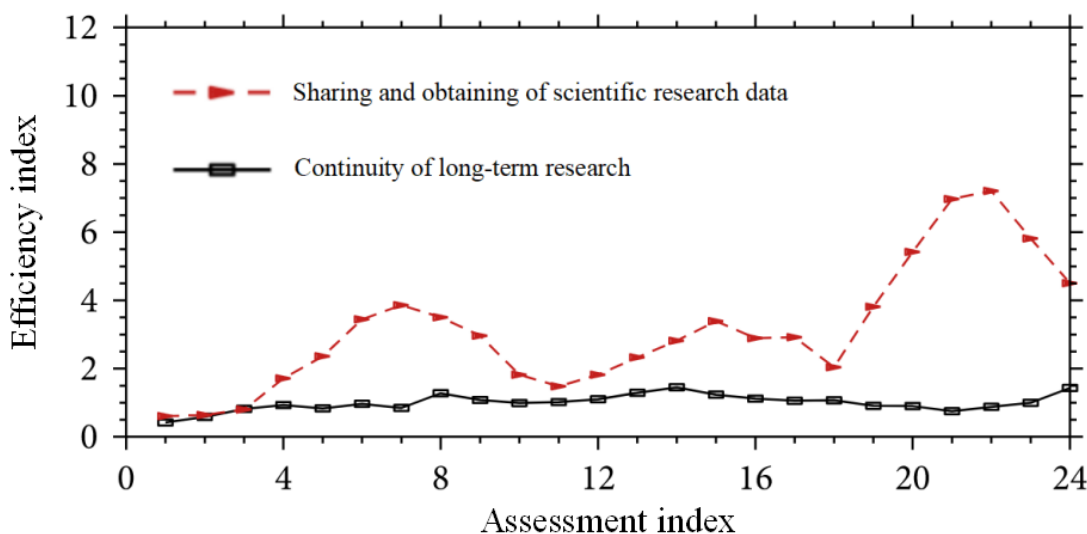|	Assessment	Efficiency
Sharing and obtaining of scientific research data	13.34	12.06
Continuity of long-term research	14.82	15.56

Fig.1 The Leading Nature of Scientific Research Development in Colleges and Universities

3. Expanding the Needs Assessment of Scientific Research Data Management in Colleges and Universities in China

3.1 Establish Scientific Evaluation Mechanism

Before the investigation, introduce excellent research data management cases to the respondents, and more intuitively explain to the respondents why the investigation is needed and the significance of the investigation results. To master the data generated by scientific researchers in the process of scientific research, the data management behaviour in the process of scientific research, and the requirements for scientific research data management, so as to provide basis for the management of scientific research data assets and the development of scientific research data management in Colleges and universities. We should attach importance to the needs of teachers, stimulate the enthusiasm and initiative of higher vocational teachers to participate in scientific research, and develop and improve the scientific research ability of teachers. The establishment of incentive policies encourages teachers to undertake not only teaching but also certain scientific research tasks. On the basis of ensuring reasonable evaluation of teaching and scientific research, a scientific evaluation mechanism is established to promote the effective combination of teaching and scientific research. Teachers who have achieved good results should be commended, and teachers who have made progress, especially group teaching and research achievements, should be commended. In this way, the teaching and research of school teachers can be solid, more cooperation can be achieved, and the overall teaching and research level of school teachers can be improved.

3.2 Solve the Contradiction between Scientific Research and Teaching in Time and Space

To carry out scientific research, we need to strengthen the construction of the hard environment of the discipline. Without the basic facilities such as laboratories, instruments and equipment, books and information networks, scientific research will lose its platform and carrier. During the experiment, some teachers didn't understand the subject deeply or even misunderstood, and they couldn't get into the subject. The school should take effective ways and methods to train teachers, the teaching department should do well in organization and management, and constantly improve the research level of teachers. Delivering efficient management processes and business processing methods will prompt more management departments to start thinking about the informatization construction of their own units and improve business processes, thus improving the work efficiency of the departments. The guide and sample of survey questions, as well as the interview manuals, interview forms, templates and other tools provided, play an important role in how the needs assessment designers and implementers effectively communicate with researchers around the needs assessment objectives. Through the reform of systems and methods, giving full play to the positive and effective role of funds in promoting research and stimulating the vitality of scientific research are not only the needs of teachers, but also the work that management departments should improve.

The evaluation parties discuss different opinions, and the coordinator gives the final score according to the discussion process, so as to enter the conclusion stage, put forward the existing problems, and clarify the next work goal and responsibility division in the final proposal stage. In the process of evaluation implementation, researchers' awareness of data management and sharing has been enhanced, and communication, understanding and interaction between scientific research management, service personnel and researchers have been strengthened, laying a good foundation for future cooperation. Dimensions are the pillars of good scientific research data management. Each dimension needs to maintain stable and coordinated development. Only in this way can the effective management be ensured. Characteristic classroom teaching, scientific research reports and scientific research papers mainly assess the scientific, creative and practical nature of scientific research results, their guiding value to the development of theory and practice, and the exertion of overall benefits. To stimulate the enthusiasm of teachers and researchers in scientific research, it is more important to find out the key factors that cause the gap in scientific research performance among teachers through post-evaluation analysis, and then to realize the overall improvement of the scientific research ability of all teachers through targeted formulation of relevant policies and measures. Scientific research requires complete, accurate and continuous documentation. In

addition, soft environment construction is the focus of scientific research.

4. Conclusion

This paper studies the influencing factors of the demand management of scientific research data of university teachers. Scientific research achievements mark the core development strength of a country. Scientific research information management system plays an obvious role in the development and promotion of national science and technology. The management of scientific research data in Colleges and universities is a complex and arduous task, and the premise of doing well in scientific research data management is to do well in needs assessment. Industrial transformation and development rely on scientific and technological innovation. In order to improve the level of service industry, higher vocational education must attach importance to scientific research and technological innovation from the perspective of national strategy. Teachers' research scope, research methods, data collection, analysis ability, and cooperation in scientific research process are evaluated; It is necessary to establish an institutionalized and long-term partnership. In particular, some major disciplines should try their best to cooperate with international high-level disciplines for a long time, which is of great benefit to the training of teachers and students, the development of disciplines and the promotion of scientific research. The solution of management problems must rely on technical means, but if technical means are taken as the main or even the only way to solve management problems, it is likely to affect the real role of technical means in the management process.

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