

# Study on the Sharing Mechanism of Economics and Management Experimental Teaching Resources

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## Abstract

Experimental teaching is the key link for colleges and universities to cultivate innovative and entrepreneurial talents, and experimental teaching resources are the basis for ensuring the quality of experimental teaching. The uneven distribution of experimental teaching resources is a key problem faced by universities, and the resource-sharing mechanism is an effective means to solve this problem. Through the analysis of the current situation of the sharing of experimental teaching resources of economics and management majors in colleges and universities, the reasons for the lack of resource sharing are summarized. Combined with the main problems in the sharing of experimental resources, this conceptual paper proposes to strengthen the leading role of the government in the construction of the platform for sharing experimental resources, improve the promotion and incentive mechanism of experimental teachers, improve the management mechanism of experimental teaching, enhance the comprehensive service ability of the teachers of the experimental platform for sharing software and hardware resources, and expand the scope of mutual recognition of credits among universities, strengthen the exchange of laboratory talents and achievements to strengthen the construction of the sharing system of economic and management experimental teaching resources, so as to realize the complementary advantages of experimental teaching resources among colleges and universities, improve the utilization efficiency of experimental teaching resources, and jointly improve the quality of personnel training.

**Keywords:** experimental teaching resources, sharing mechanism, economics and management, experimental teacher

## 1. Introduction

Experimental teaching is a process of combining theoretical knowledge and practical activities. It can not only exercise students' ability to conduct scientific research but also stimulate students' desire to explore and seek knowledge. It is an important method to cultivate students' innovative spirit. Both domestic and foreign universities regard experimental teaching as an important way to cultivate students' innovative consciousness and ability (Xue & Wang, 2021), and experimental teaching cannot be carried out without the construction and accumulation of experimental resources.

Experimental teaching resources are an important resource for colleges and universities to cultivate innovative and entrepreneurial talents. With the strong support of the state, the construction of experimental teaching in colleges and universities has developed rapidly, and many colleges and universities have set up their own independent experimental teaching centers. However, due to the differences in the nature, financial support, and emphasis of colleges and universities, the distribution of experimental teaching resources in colleges and universities in China is uneven. Some colleges and universities have weak foundations and are short of resources, while some colleges and universities have problems with repeated construction and waste of resources. At present, almost all universities in China have economic management majors. In the case of similar majors, experimental teaching software and experimental instruments and equipment are mostly the same. Some of these

software and hardware are expensive, but these experimental resources are idle in the spare time of experimental teaching. Due to the lack of attention to experimental teaching, there are relatively few exchanges of experimental teaching teachers between schools, and the level of experimental teaching is often stagnant.

In order to actively promote the sharing of experimental teaching resources in colleges and universities, the Department of Higher Education of the Ministry of Education has repeatedly mentioned that it supports universities in building an open, compatible, expandable, and forward-looking experimental teaching management and sharing platform to achieve cross-platform, cross-school and cross-regional experimental teaching resource sharing (Li, 2015). In 2013, the Ministry of Education launched the construction of a national virtual simulation experiment center and a national experimental teaching center, supported universities in building an experimental teaching system of their own specialty, and encouraged universities to share advantageous teaching resources (Hu et al., 2015). However, in addition to the great progress made in the scientific research instrument-sharing platform of some subordinate universities, the sharing of experimental resources in local universities is still not optimistic, and there are still many problems and difficulties in the sharing system (Lin et al., 2021).

How to build an open and interactive platform for sharing economic and management experimental teaching resources, realize the unification and integration of experimental teaching resources of economics and management, narrow the difference in experimental teaching level caused by the overall planning of economic development, promote the mutual integration and commonality of economic and management experimental teaching resources between different regions and schools, and how to improve the utilization rate of experimental resources, and maximize the comprehensive benefits of laboratories are important topics that need to be solved in the construction of economic and management laboratories in colleges and universities.

The objective of this study is to analyze the current situation of the sharing of economic management experimental teaching resources in Chinese colleges and universities, explore the reasons for the insufficient sharing of experimental teaching resources, and put forward specific measures to improve the sharing level of experimental teaching resources.

## **2. The Classification and Sharing Status of Experimental Resources in Colleges and Universities**

### *2.1 Classification of Economic and Management Experimental Resources*

Laboratory resources can be classified from different perspectives, including both hard resources and soft resources, both material resources and immaterial resources, and tangible resources and intangible resources (Liu, 2014)

The hard resources of the laboratory, which are tangible resources, mainly include laboratory room resources, equipment, and other resources, are the material basis for the existence of the laboratory. The development of the laboratory almost depends on the acquisition and accumulation of hard resources. In a broad sense, the soft resources of economic and management laboratories mainly include laboratory construction concepts, experimental teaching resources, laboratory cultural atmosphere, information environment, human resources, etc. (Liu, 2014). In a narrow sense, the economic and management laboratory soft resources include experimental software, human resources, experimental teaching content, etc. (Zong et al., 2019).

Different from the experimental teaching of science and engineering, the experimental teaching of economy and management mainly simulates real economic management activities into sand tables or simulation software through simulation and information technology so that students can experience the business process of economy and management in the virtual simulation environment created. The experimental equipment of the economic management specialty is mainly composed of computers, simulation sand tables, other hardware equipment, and related professional software. The experiments are mostly conducted through computer simulation software operation and sand table deduction. In general, software resources occupy a more important position for economic and management laboratories. Some colleges and universities in China also have interdisciplinary laboratories for economics and management, such as Shanghai Jiaotong University, Beijing University of Technology, East China University of Science and Technology, South China Normal University, and other colleges and universities have behavioral science laboratories, which can serve both experimental teaching and scientific research.

This paper mainly discusses the sharing of economic and management laboratory resources from two aspects: (1) laboratory hard resources, mainly including laboratory site and laboratory equipment, in view of the fixedness of the experimental site, in this paper, the sharing of laboratory hard resources is focused on laboratory instruments and equipment, and (2) laboratory soft resources, including laboratory software, experimental teaching content

and laboratory teachers.

### *2.2 Problems in the Sharing of Economic and Management Experimental Resources*

Although colleges and universities in China have made some reforms and efforts in the sharing of economic and management experimental resources, in general, there are still many deficiencies in resource sharing, mainly in the following aspects.

(1) The awareness of openness and sharing is weak. Compared with universities in Europe and the United States, universities in China have a weak awareness of opening experimental resources, and economic management experimental resources are less open. Although the Ministry of Education has repeatedly advocated the sharing of experimental resources, in terms of sharing service awareness, the open atmosphere of domestic universities is generally insufficient. For the opening of some large-scale instruments, it is still necessary for the state to take some compulsory measures (Huang et al., 2018).

(2) The scope of resource sharing is limited. Some colleges and universities have centralized the management of experimental resources scattered in various colleges and established independent experimental teaching centers. These centralized constructions reduce the repeated construction of experimental sites or the repeated purchase of experimental resources between colleges to a certain extent so that resources can be shared. However, the scope of sharing is mainly for the departments within the university, which cannot meet the needs of cross-university and cross-region sharing. The vast majority of hardware resources still mainly serve the departments where the resources are located, and the sharing level is low. More colleges and universities have established or are establishing large-scale equipment-sharing platforms, but due to different majors, the sharing rate of these devices included in the sharing platform is not high, and the sharing channels with off-campus departments are still not open.

(3) The distribution of resources among schools is uneven, and the sharing rate is low. Due to the differences in the nature, financial support, and emphasis of colleges and universities, the experimental teaching resources of colleges and universities in China are unevenly distributed. Some colleges and universities have weak foundations and are short of resources, while some colleges and universities have problems with repeated construction and waste of resources. The experimental teaching software and teachers are seriously unbalanced. For economics and management laboratories, the sharing of experimental teaching software, experimental teaching content, and teachers is the focus of the current research on experimental resource sharing.

## **3. Analysis of the Causes for Insufficient Sharing of Experimental Resources**

The low sharing rate of economic and management experimental resources is limited by the level of sharing technology on the one hand, but more importantly, the construction of the sharing system is not perfect, resulting in a weak willingness to share.

### *3.1 Low Informatization Level of Economics and Management Laboratories*

At present, the informatization level of economic and management laboratories is low. Laboratory information management involves many problems, such as people, equipment, cost, etc. Due to the distribution of laboratories involved, the experimental business modules of each college in the same university are isolated from each other, data are not interconnected, and information is difficult to share. Moreover, the ability to detect the use status of many laboratory resources in real-time is insufficient, or the delayed manual input platform makes it impossible for teachers and students to accurately obtain real-time information, which restricts the sharing of laboratory resources (Zhu & Chen, 2021).

### *3.2 Lack of Sharing Technology*

To realize cross-school and cross-regional sharing of economic and management experimental teaching resources, a software and hardware technology support platform is required to publish, store, calculate, schedule, manage, etc., for resource sharing. But so far, there is no complete and universal technical support plan to effectively support the construction of the cross-school and cross-regional sharing platforms of resources. The sharing platforms established by colleges and universities only meet their own specific needs (Yu & Huang, 2017).

### *3.3 Lack of Proper Institutional Design and Incentive Measures for the Construction of Experimental Resource-Sharing Platforms*

The construction of a regional sharing platform for economic and management experimental teaching resources is a complex project involving resource integration, software and hardware platform construction, operation management, daily maintenance, and other work, which requires a lot of human and material resources. However,

the specific who is in charge, how to implement it, and how to divide rights, responsibilities, and interests have led to the lack of motivation for universities to build, and resource owners are reluctant to include their own resources in the scope of sharing (Li et al., 2014).

At present, many experimental resource-sharing platforms are built to cope with the examination and acceptance of the superior departments and provide a free public service to society. Resource sharing involves the constraints of personnel, safety, management, and other factors. How to provide a guarantee mechanism and incentive means to mobilize the enthusiasm of resource sharing is an issue that needs to be considered (Huang et al., 2018).

In addition, the protection of relevant intellectual property rights also needs to be considered. Most of the software resources in the economic and management shared resources of colleges and universities are purchased from the market, and a small number are created by colleges and universities independently. These resources are protected by relevant intellectual property rights. How to protect intellectual property rights when sharing, how to protect the interests of property owners, and whether property ownership companies or universities are willing to share software online are all issues to consider (Zong et al., 2019).

### *3.4 Insufficient Attention to Experimental Teaching, Unreasonable Promotion Incentive Mechanism, and Lack of Experimental Teachers*

At present, the management system for managing experimental teaching is still imperfect. It is generally believed that experimental teaching is a teaching mode based on the theoretical courses of corresponding majors, which is the practical continuation of relevant theories and the verification of theoretical teaching content, and experimental teaching is often attached to theoretical teaching. The administrative departments at all levels do not pay enough attention to the experimental teaching of economics and management, and the experimental teaching is still not specially managed as an independent teaching link (Feng, 2021).

Since there are few independent experiments in the economic and management experimental teaching, the theoretical teachers are basically responsible for the experimental teaching. Laboratory personnel is mainly responsible for the construction of the laboratory teaching platforms, the basic maintenance of equipment and facilities, the opening and sharing of resources, and the protection of experimental teaching effects. Colleges and universities usually position them as teaching assistants, not as professionals in experimental teaching. In addition, due to institutional reasons in colleges and universities, experimental teachers are at a disadvantage in terms of salary, professional title promotion, etc. Many colleges and universities fail to treat the contributions of experimental teachers equally with those engaged in theoretical teaching in terms of evaluation, reward, etc., which reduces the enthusiasm of experimental teachers, and leads to the difficulty in attracting excellent full-time professionals to experimental teaching in economics and management laboratories (Zhu & Chen, 2021). It is difficult for experimental teaching to play its due role in the whole teaching system.

The lack of experimental teachers seriously restricts the development of experimental teaching and has a certain negative impact on the accumulation of high-quality experimental teaching resources and willingness to share.

### *3.5 Insufficient Comprehensive Service Capacity of Experimental Resource-Sharing Platform*

At present, colleges and universities that have established experimental resource-sharing platforms share more hard resources, mainly equipment and instruments, while soft resources are rarely shared. Some instruments require sufficient expertise to be shared and utilized. For example, the "Behavioral Science Laboratory" of Antai College of Economics and Management of Shanghai Jiao Tong University, focusing on the scientific issue of behavioral cognition and economic management, has introduced equipment and software such as near-infrared, physiological, eye movement, EEG, behavioral observation and virtual reality systems. Specifically, it includes a near-infrared brain functional imaging system, multi-channel wireless physiological recording, and analysis system, eyeglass eye tracking system, desktop eye tracking system, wireless dry electrode system, transcranial electrical stimulation instrument, behavior observation recording and analysis system, finger motion tracking system, cognitive evaluation system, immersive virtual reality VR large screen interactive display system, immersive virtual reality VR team collaborative interactive display platform VR eye tracker system, motion capture, and analysis system, etc. (Shanghai Jiao Tong University., 2020). These interdisciplinary experimental instruments are numerous and complex. How to fully share them is worth studying.

Similarly, the sharing of experimental teaching software also requires the platform staff to have systematic professional knowledge. At present, the teaching software of economic and management laboratories is generally used by experimental teachers, who are mostly theoretical teachers. Full-time laboratory teachers are not very familiar with the software, which forms a big obstacle to the sharing of experimental teaching software. The

resource-sharing platform personnel needs to share all kinds of software, experimental teaching content, and experimental equipment, which requires the comprehensive ability of the experimental platform teachers.

In order to improve the service level of the experimental resource-sharing platform, it is necessary to have a team of experimental teachers who are proficient in the operation of software and hardware. The laboratory teaching software of economics and management is generally used by experimental teachers, and laboratory teachers are not proficient enough in teaching software and hardware, which causes inconvenience to the sharing of experimental resources.

#### **4. Discussion on the Sharing and Improvement of Economics and Management Experimental Resources**

The sharing of economics and management experimental resources mainly involves the sharing of equipment, software, experimental teachers, and experimental teaching content. In view of the problems in sharing, it is recommended to improve the efficiency and level of resource sharing from the following aspects.

##### *4.1 First of All, It Is Necessary to Realize the Intramural Sharing of Economics and Management Experimental Resources on Campus*

According to the differences of each university, the experimental resources of the liberal arts can be gathered first to establish a liberal arts experimental center so as to facilitate the sharing of experimental sites and equipment within the university. For example, the Liberal Arts Practice Center established by Beijing Technology and Business University mainly relies on the 16 majors of the Economics School, Business School, and Law School to carry out comprehensive experimental teaching activities of economics, management, and law for the whole university. The Liberal Arts Practice Center realizes the coverage and resource sharing of major disciplines and lays a good foundation for interactive, interprofessional, and interdisciplinary comprehensive practical teaching activities in economics, management, and law (Beijing Technology and Business University). To some extent, this has realized the campus sharing of site resources, instruments, and equipment hard resources.

In order to realize the sharing of economics and management experimental resources within the university, it is necessary to introduce relevant systems and policies, coordinate the interests between the supply and demand of resources, and give the resource supplier a certain amount of cost compensation.

##### *4.2 The Government Is Required to Take the Lead in the Construction of the Regional Experimental Resource Sharing Platforms*

The improvement of the sharing level of experimental resources is inseparable from the construction of the sharing platform. The construction of an inter-university sharing platform involves the integration of resources from multiple parties and requires the coordination and cooperation of multiple parties. In order to actively promote the construction of the sharing platform, it is better to have the government education department as the leading party to undertake the entire top-level design and layout, coordinate the relationship between all parties, and provide financial support.

It is necessary to coordinate the charging mechanism of software suppliers and protect software property rights. Economic and management experimental teaching software is generally purchased directly from software providers by colleges and universities for their own experimental teaching. If the experimental resources are shared across campuses, the software provider needs to change the original charging method and charge for on-demand services according to the number of users and duration, and the developer needs to cooperate with the technology connection when the software is connected to the sharing platform. The charge and benefit distribution among software resource suppliers, demanders and software developers needs the leadership of government departments.

##### *4.3 Using Advanced Technology to Build a Platform for Sharing Experimental Resources*

VPN technology can help to share resources across campus. Many universities have independent colleges or secondary colleges. Some campuses are far away from each other or even not in the same city, but there is a demand for resource sharing between them. At present, many domestic universities have realized cross-campus resource sharing through VPN technology.

New technologies such as blockchain technology and cloud computing technology make it possible to share economics and management experimental resources among schools. The use of blockchain technology has a catalytic effect on the development of sharing economy. Blockchain technology can become the core technology of experimental resource sharing, which can expand and protect the resource space and information security shared by laboratories. Blockchain technology can break the information island and improve the management

efficiency of virtual simulation experiment teaching (Cheng et al., 2022). Building a sharing platform through cloud computing technology can shield the diversity of underlying hardware systems and system platforms and dynamically organize computing resources to meet the environmental needs of different applications. Cloud computing uses virtualization, networking, and distributed storage technologies to achieve resource integration and sharing, and users can obtain software resources, computing resources, and data storage resources on demand (Zong et al., 2019)

Some experience of resource sharing technology applications is worth learning. For example, the resource-sharing technology of Peking University has made breakthroughs in resource-sharing technology. The CARSI alliance operation management mechanism and related systems independently designed and developed by the CARSI team of Peking University can all run in an IPv6 environment. CARSI can be used to access 182 application resources that have been accessed at any time and anywhere to solve the problem of limited access to purchased electronic resources outside the school. At present, CARSI has helped 19 products of 7 domestic companies go abroad, receive direct visits from foreign users, and actively promote the sharing of high-quality resources (Peking University, 2021).

#### *4.4 Improve the Promotion and Incentive System, Enrich and Stabilize the Experimental Teaching and Sharing Platform Team*

In order to improve the level of experimental teaching and the efficiency of experimental resource sharing, it is first necessary to enhance the sense of belonging and achievement of experimental teachers and give full play to the due role of experimental teachers in the entire teaching system. The experimental technical team is the most dynamic and active key factor in the comprehensive open sharing of scientific instruments. They are no longer the auxiliary teaching staff in the old ideas, and they should be made the mainstay of experimental teaching and scientific and technological innovation.

Change the promotion and evaluation method of experimental technicians, treat them equally with theoretical teachers in terms of salary and promotion mechanism, and improve the visibility of the supporting role of experimental technology (Zhang et al., 2022). It is necessary to improve the promotion mechanism of experimental teachers, unlock their career development channels, establish a reasonable incentive and assessment mechanism, and attract more excellent and high-quality talents to experimental technical posts.

The domestic university economics and management experimental resource-sharing platform can learn from the effective practices of foreign resource-sharing platforms. For example, the world-class university public instrument platform personnel always have a good educational background structure and has attracted a group of stable, excellent, and professional technical teams by establishing an independent professional title team and providing better welfare benefits for technical personnel (Wang & Bai, 2020).

#### *4.5 Perfect the Management Mechanism of Experimental Teaching and Improve the Quality of Experimental Teaching*

In the long run, the experimental teaching content needs to be re-planned and designed, and independent experimental courses complementary to theoretical teaching should be set up to improve students' practical ability and experimental teaching quality. Experimental teaching is carried out by special experimental teachers to fully tap the potential of experimental teachers.

According to the actual situation, colleges and universities should appropriately introduce social teaching forces and employ social enterprise personnel as instructors of relevant experimental courses. For example, famous foreign business schools attach great importance to timely accessing the latest developments in related fields, timely incorporating new knowledge and skills of economic management into practical teaching activities, and ensuring that the teaching content is always synchronized with the development of cutting-edge science. At the same time, colleges and universities should pay attention to the enrichment of experimental teaching content and keeps pace with the times. Experimental teachers of economics and management in colleges and universities should not only have solid theoretical knowledge in economics, management, accounting, finance, etc., but also have practical experience in investment, management, or starting a company. For example, Stanford Graduate School of Business invites many business executives from top companies such as Silicon Valley to give lectures to students every year, telling them about their own management experiences (Ge, 2017). Babson College has a group of outstanding industry professionals, including experienced entrepreneurs, business executives, scholars, and scientists (Xue & Wang, 2021).

#### *4.6 Increase the Comprehensive Technical Service Capabilities of the Experimental Sharing Platform*

Although there are not many instruments and equipment that can be included in the shared platform for

economics and management experimental resources, they should be fully utilized. In addition to teaching, platform instruments and equipment can also be used for scientific research. The experimental resource-sharing platform can learn from the practice of some foreign public platforms to build a "one-stop" technical support for experimental instruments and equipment to improve the sharing rate. The foreign laboratory platform instrument management personnel usually have a doctor's degree, and they are proficient in more than ten sets of equipment at the same time. They can not only operate the equipment skillfully but also carry out simple maintenance (Lai et al., 2021). The personnel of the economics and management resource-sharing platform can focus on the training of instrument use, help solve the technical problems encountered in the use of instruments and provide professional guidance for the sharing of instruments and equipment. For some interdisciplinary instruments, such as the behavioral science laboratory series instruments, laboratory teachers can train the use of instruments and also participate in the seminar on the use of such instruments so as to closely integrate the training and use of instruments with teaching and research.

Most of the economics and management software is mainly used for experimental teaching, and some can be used for both teaching and scientific research. The experimental platform teachers should be familiar with the operation and application of various software. For some experimental teaching software, ERP, VBSE, economic and trade training teaching software, accounting training teaching software, enterprise management software, human resource management software, logistics simulation software, entrepreneurial decision-making and business decision-making software, tax software, financial software, financial software, etc., platform teachers should be proficient in the functions of the software and be able to train how to apply the software. For software that can be used for scientific research, such as STATA, Eviews, MATLAB, SPSS, EXCEL, MySQL & Spark SQL, Python & R language, and other data statistical analysis software, it is necessary for platform teachers to be proficient in software data analysis methods to guide the scientific research data analysis. The sharing platform can learn from some foreign universities and other practices, such as the data analysts in the Stanford Genetic Testing Center providing various links of service from software "use training" to "result analysis" to improve the output efficiency of experimental teaching and scientific research results.

Experimental teachers of sharing platforms need to develop special functions of instruments, equipment, and software to improve the level of resource sharing.

#### *4.7 Establish an Information-Based Experimental Teaching Platform to Promote the Sharing of Experimental Teaching Content*

To some extent, the sharing of experimental teaching content is also the sharing of experimental teachers. The construction of information experimental teaching platforms can effectively promote the sharing of experimental teaching resources. Information technology and Internet technology can be used to establish online experimental courses. For example, Australian universities have basically set up online experimental courses or course websites (Zhang, 2020). By means of shooting experimental videos, making teaching courseware, and developing virtual simulations, online experimental courses are gradually constructed and developed. Teachers can record the teaching content in the classroom when conducting experimental teaching. For example, most classroom teaching videos of Massey University in New Zealand were taken by cameras installed at the back of the classroom and automatically imported into the system (Li et al., 2019).

In recent years, China has also been strengthening the construction of online learning and distance learning platforms so that the sharing of experimental teaching resources is no longer subject to the temporal and spatial conditions of fixed classrooms. Since 2013, the Ministry of Education has begun to promote the construction of teaching resources for virtual simulation experiments in colleges and universities across the country. The second phase of the construction of the National Higher Education Smart Education Platform added a virtual simulation experiment section in June 2022 to meet the needs of online teaching experiments and practices, which provides the possibility for more remote sharing and exchange of experimental teaching resources between universities (Press Office of the Ministry of Education, 2022).

In short, by recording the experimental teaching classroom of economics and management and then transmitting it to the experimental resource-sharing platform of colleges and universities or to the virtual simulation experiment plate in the national online learning platform, the experimental teaching content can be shared.

#### *4.8 Implement Mutual Recognition of Credits Among Colleges and Universities to Further Strengthen the Exchange of Laboratory Talents and Achievements*

To improve the quality of experimental teaching, it is necessary to exchange experimental talents and achievements for colleges and universities. The laboratories of various universities can regularly display excellent experimental teaching achievements, strengthen personnel exchanges with other universities'

laboratories, and carry out cooperative research on experimental teaching.

The mutual recognition of credits between different universities provides a new way for the exchange and sharing of experimental teaching achievements. At present, few colleges and universities in China participate in the mutual recognition of credits. The mutual selection of courses between Peking University and Tsinghua University is breaking the "wall" between universities. The experimental teaching of economics and management among colleges and universities can also try to open the door to jointly promote talent training and resource sharing. Lu Xiaodong, a researcher at the School of Education of Peking University, believes that it is a major trend to further break the "wall" between universities and promote mutual recognition of credits among universities, but "technical problems" still need to be solved. To promote the mutual recognition of credits, we should also establish a sound credit accounting mechanism. Only by establishing a strict credit financial accounting mechanism among colleges and universities can "mutual recognition of credits" go deep and far (Ye, 2021).

## 5. Conclusion

In the era of "Big Data, Artificial Intelligence, Mobile Internet, Cloud Computing, Internet of Things, Blockchain", it is imperative to optimize the sharing of university resources and change the way of experimental teaching and learning (Shandong Education Association, 2020). Strengthening the opening of economics and management experimental resources is not only a new requirement of the state for university laboratories but also a difficult problem that university laboratories urgently need to explore and solve under the new situation. The construction of an open sharing system of laboratory resources is not a simple technical problem which needs to be solved by taking comprehensive measures, such as strengthening top-level design, improving promotion mechanisms, strengthening team building, and improving sharing awareness. Improving the management mechanism of experimental teaching, setting up independent economic and management experimental courses, letting experimental teachers carry out experimental teaching, and no longer viewing experimental teaching as an extension of theoretical teaching are particularly critical to improving the quality of experimental teaching and the efficiency of sharing experimental resources.

Some limitations should be noted. First, although this study discussed the existing problems and causes in the sharing of economics and management experimental resources and put forward suggestions for improving the resources sharing level, there is still a lack of follow-up interviews to further verify the views put forward. In future research, we will make up for this shortcoming to further enrich the research in this field. Second, how to strengthen the sharing of economic and management experimental resources among colleges and universities, improve the quality of experimental teaching, and cultivate high-quality talents, there is still a lot of work to be further studied. This paper only discusses the sharing of economics and management experimental resources in domestic colleges and universities. The comparative analysis of the sharing mechanism of experimental resources among different subjects, different regions, and between domestic and foreign countries are all issues worthy of further discussion.

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