## On the Problems and Countermeasures of Financial and Asset Management in the Construction of Teaching Resources in Colleges and Universities

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Abstract: With the rapid development of information technology, combined with the needs of multi-level and diversified learners, and in response to the changes of uncertain external environmental factors such as the COVID-19 epidemic, various forms of network teaching resources (hereinafter referred to as "teaching resources") have been built and widely used in the daily teaching of colleges and universities. The construction of teaching resources has become an indispensable part of college education and teaching. However, from the perspective of asset management and accounting, although the construction of teaching resources in colleges and universities has the "Government Accounting System", relevant standards and application guidelines, provincial and municipal state-owned assets management methods as well as relevant policies and regulations as the basis for the management and operation, the situation in practice is more complicated and there are some deviations between policy coverage and practice. This paper analyzes the financial and asset management problems of teaching resources construction from the perspective of combining theory and practice, and tries to seek more effective countermeasures.

#### **1. Related Concepts**

Teaching resources [1], this paper mainly refers to the network teaching resources, which is the premise and foundation of network education. It mainly includes professional resource bank, Course Resource Bank and teaching resource platform [2]. With the gradual expansion of network education, network teaching resources are becoming more and more abundant, and the effective management of teaching resources has become the key to carry management out network education, providing efficient storage management for various learning content objects. The construction platform of teaching resources and carrying out network teaching as the core, and faces massive resource processing. It is a resource management platform that integrates the distributed storage of resources, resource, resource evaluation and knowledge management.

According to the Government Accounting Standards No.3 on Fixed Assets Standards [3], the fixed assets are defined as: Assets controlled by administrative institutions to meet their needs for conducting business activities or other activities, with a service life of more than one year (excluding one year) and a unit value of more than 1000 yuan (among which, the unit value of special equipment is more than 1,500 yuan), and was basically maintained the original material form during use, generally including houses and structures, special equipment, general equipment, etc.

According to the Government Accounting Standards No.4 on Intangible Assets Standards [4], the intangible assets are defined as: identifiable non-monetary assets without physical form controlled by government accounting entities, such as patent rights, trademark rights, copyrights, land use rights, non-patented technologies, etc.

# 2. The Current Situation of Accounting Treatment and Asset Management of Teaching Resources in Colleges and Universities

According to the "Government Accounting System" [5], "Government Accounting Standards No.3 on Fixed Assets Standards" (hereinafter referred to as "Fixed Assets Standards") and "Government Accounting Standards No.4 on Intangible Assets Standards" (hereinafter referred to as "Intangible Assets Standards"), the assets and accounting treatment of teaching resource libraries in colleges and universities can be broadly divided into the following three situations:

Firstly, according to the concept of "education expense", the teaching resources, regardless of the amount, with a range from several thousand yuan to tens of thousands, hundreds of thousands or even millions of yuan, will be expensed for accounting treatment, and will not be managed as university assets.

Secondly, referring to the fixed assets standards, and according to the definition of fixed assets, "the service life exceeds one year, and the unit value is above 1000 yuan", they are treated as books - electronic teaching materials for accounting purposes, and are managed as books in fixed assets without depreciation.

Thirdly, referring to the intangible assets standards, and according to the recognition conditions of Article three, "Economic benefits are likely to flow in + cost or value can be reliably measured", the accounting treatment is recognized as intangible assets, which will be managed as intangible assets and amortized on a monthly basis.

#### 3. Explore the Significance of Teaching Resources Construction and Management

It is in line with the requirements of strengthening the financial fund management in colleges and universities under the background of increasing investment in the construction of their teaching resources. In the context of the development of information technology, the construction of teaching resources was originally intended as a useful and favorable supplement to classroom teaching under the concept of independent and lifelong learning of college students. After the outbreak of COVID-19 pandemic in 2020, the changeable epidemic situation accelerated the speed and investment of teaching resources construction of the government as well as colleges and universities. However, the education authorities and universities mainly used the financial funds, therefore the standardization of teaching resources construction and management is in line with the objective requirement of improving the management of financial funds.

It meets the requirements of diversified characteristics of teaching resource library in colleges and universities. Firstly, the investment is large: the perspective of construction and use of higher education belongs to education investment. Generally, the investment in the construction of a single teaching resource exceeds one thousand yuan, and most of them are ten thousand yuan, even tens or millions of yuan; Secondly, the use time is long but difficult to be determined by reasonable estimation: The use time is long, which may be one semester, or several semesters or even several years, and the use time of specific teaching resources under repeated epidemics is more difficult to predict; Thirdly, it is difficult to determine the inflow of economic benefits: Most teaching resources are used free of charge by users, but there is no lack of paid transfer between schools and paid use of individual teaching resources by off-campus personnel.

It meets the needs of the existing system and standards with a coverage vacuum. In view of the diversified characteristics of teaching resources, based on the clear guidance on fixed assets management in the state-owned assets management policies of various provinces and cities, and because of the lack of standardization for the follow-up use and disposal management of intangible assets, and the existence of a vacuum in the coverage of management policies, universities are likely to tend to take advantage of the asset management and accounting treatment of teaching resources and choose the simple, easy-to-operate and low-risk expense-based management mode.

It meets the inevitable requirements of internal control of asset management. One of the objectives of internal control in colleges and universities requires reasonable assurance of the safety and effective use of unit assets. If the teaching resources with increasing investment amount are completely managed expensively, there is obviously a lack of follow-up management of safe and effective use of assets. Capitalization management of the teaching resources is an inevitable requirement of internal control management of assets, but whether electronic books as fixed assets or intangible assets management is worth exploring.

#### 4. Problems in Accounting Treatment and Asset Management of Teaching Resources

Firstly, there are great differences in accounting treatment methods among colleges and universities, which cannot be compared with the same kind. From the perspective of government accounting statements, accrual-based financial statements provide effective decision support for governments at all levels to understand the financial status of assets and liabilities, and provide effective decision support from the policy level. However, the expense-based, fixed-asset-based and intangible asset-based recognition, measurement and recording of teaching resources input and subsequent management among colleges and universities cannot achieve similar statistics and comparison of teaching resources input in the same period, nor can they provide relevant data of teaching resources input in different periods, which is not conducive to the management and allocation of assets and resources.

Secondly, expense-based management is easy to cause management vacuum and repeated inefficient construction. It is the simplest and easiest way for colleges and universities to adopt the expense-based accounting treatment for the construction of resource pool, but it also has the most obvious problem. Expense-based means the lack of follow-up asset management, which easily leads to the situation of construction without management or construction with less management. It is also easy to cause duplicate construction of teaching resources of the same or similar courses among the different colleges, the same majors or similar majors.

Thirdly, the fixed assets management is contrary to the definition of fixed assets. The management and accounting treatment of teaching resources as fixed assets seems reasonable, but it does not meet the most basic characteristic of fixed assets: tangible. Instructional resources themselves are not shaped, although they may exist in a certain carrier, CD-ROM or other similar forms. However, they do not have a fixed shape. Just like books, the carrier books bearing copyright are fixed assets, but the rights of the books are copyright, and copyright belongs to the category of intangible assets. From this point of view, the bought CD can be managed as electronic books, but the teaching resources produced are more appropriately managed as intangible assets.

Fourthly, the intangible assets management lacks explicit policy basis. Intangible assets in government accounting are defined as "identifiable non-monetary assets without physical form controlled by administrative institutions", enumerating patent rights, trademark rights, copyrights, land use rights, non-patented technologies and so on. Because teaching resources mainly exist in the education system, it is normal that they are not enumerated, but it is precisely because they are not enumerated that teaching resources are diversified in asset management and accounting treatment.

Fifthly, intangible assets management lacks a disposal path. In addition to the lack of explicit policy basis mentioned above, a more important reason and problem lies in the follow-up management and disposal of intangible assets after they have been made available in colleges and universities. In Shanghai, for example, according to the Measures for the Management of Disposal of State-owned Assets of Municipal Institutions in Shanghai (Shanghai Caijiao [2016] No.28) [6] and the Notice on Further Increasing the Efforts to Simplify and Decentralize the Management of State-owned Assets of Municipal Institutions (Shanghai Caizi [2019] No.16, referred to as the Notice) [7], although intangible assets are included in the disposal scope, and it also stipulates that the disposal of monetary funds, foreign investments and possession, land in use, houses and structures, as well as one-time disposal of state-owned assets with a book balance of more than 5

million yuan shall be dealt by the competent department for review and financial approval; In addition, it shall be audited by the competent department or review and financial record. However, the key problem lies in the fact that the minimum service life of fixed assets is specified by the notice later, while the intangible assets are subject to Article 17 of the Intangible Assets Standards, one is subject to legal provisions, the other is subject to relevant contracts, and the other is subject to expectations. As a public institution, colleges and universities are standardized in the first place, but there is no provision in the law and no agreement in the contract. Then who is expected to determine? Even if colleges and universities make their own decisions and submit them to the competent departments for approval, on what basis the competent department will review it, who will make the rules and who will be responsible for it, are yet to be decided.

#### 5. Countermeasures and Suggestions on Teaching Resources Management

Firstly, where the existing government accounting system and guidelines do not cover, it is suggested that the provincial finance departments authorize the education supervisors to formulate industry-related guidance on intangible asset management.

Secondly, it is suggested that the education authorities should introduce convenient and feasible industry guidance policies and provide convenient disposal policies and paths according to the actual construction and management of intangible assets such as teaching resources in colleges and universities. As the main body of government accounting, the business characteristics and management of colleges and universities are different from those of other institutions. It is suggested that the competent education department should add "teaching resources" to intangible assets, and formulate industry management and disposal opinions according to the authorization of the financial department, allowing colleges and universities to formulate specific school management rules within the policy scope of the competent education department.

Thirdly, it is suggested that colleges and universities should make reasonable and efficient construction programs and plans for resource library, with the starting point of improving the efficiency of using financial funds and enhancing the project performance. It is suggested that the Academic Affairs Office of colleges and universities should be the centralized management department of resource library construction, and formulate short-term and medium-and long-term construction plans of teaching resources according to the connotation construction plan of colleges and universities as well as the needs for development in various departments and majors, so as to fully consider the scientificity, necessity and rationality of the construction and avoid duplicate construction among similar majors in different colleges and departments.

Fourthly, it is suggested that colleges and universities should improve the sustainable usability of teaching resources, and strengthen the management of service life for teaching and follow-up investment. According to the audience of teaching resources and the characteristics of disciplines and majors, it is suggested that the Academic Affairs Office, as the centralized management department, should reasonably estimate the planned service life of teaching resources. For example, for courses with fast iterative speed of knowledge updating, it is suggested that the possibility of updating and modifying the original teaching resources [8], the need for investment and the service life after updating should be taken into consideration.

Fifthly, it is suggested that colleges and universities use information management means to improve the internal control level of assets, strengthen the construction of the management mechanism of the Teaching Resource Bank [9], and strengthen the use efficiency of intangible assets such as teaching resources, so as to improve performance.

#### 6. Conclusion

Teaching resources are an important investment in education and teaching in the information age in colleges and universities. It is important for colleges and universities, local education authorities and financial departments to attach great importance to it, and to fill the policy vacuum in a timely manner in conformity with perspective of policy serving the financial asset management and connotation development of colleges and universities. It is also necessary for them to give timely institutional guidance to the problems appear in the assets and accounting treatment of teaching resources in university management, as well as to standardize a series of related management such as investment, use and disposal of teaching resources construction resources, so as to further simplify administration and decentralize power to improve management efficiency, and effectively improve the performance of teaching resources construction, as well as enhance the use effect of financial funds.

The results and suggestions of this paper are based on the financial and asset management of university teaching resources construction, but they are limited by the access and disclosure of university-related data, and lack of data disclosure and support. It is hoped that the competent departments of education, the financial departments at all levels, as well as the academic theoretical and practical levels of colleges and universities, will adopt a more open attitude and focus on the effectiveness of management, to provide more clear policy and practical guidance for the construction and management of teaching resources in colleges and universities.

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