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# **Application of Activity-Based Costing in Education Cost Accounting of Private Colleges and Universities in China**

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**Abstract:** The rise and development of private colleges and universities meet people's needs for educational choice. Using activity-based costing to calculate the educational cost of private colleges and universities is helpful to rationally allocate educational resources, improve the educational quality and benefit of private colleges and universities, and ensure the sustained and healthy development of private colleges and universities in China.

**Keywords:** Private universities; Activity-based costing; Education cost; Homework

China's private colleges and universities have developed rapidly in recent years. The rise and development of private colleges and universities meet people's needs for educational choices. Private colleges and universities rely solely on personal investment or social financing to run schools, accurately calculate and control costs, and formulate scientific and reasonable tuition standards, which is of great significance to promote the healthy development of private colleges and universities' education. The principle of activity-based costing is that activities consume resources and products consume activities. Those who consume will share, and those who use more will share, those who use less will share, and those who don't need to share. Thus, the cost distortion caused by average distribution is avoided and the accuracy of cost accounting is improved.

# 1. An analysis of the applicability of activity-based costing in private colleges and universities

First, private colleges and universities will inevitably consume a lot of resources in teaching, scientific research, management and other activities, resulting in educational costs. Accurate education cost accounting is the goal pursued by colleges and universities, and provides valuable reference for private colleges and universities to make management decisions, determine the appropriate per capita training cost and formulate scientific and reasonable tuition fees.

Second, the educational expenditure of private colleges and universities has the duality of consumption and production, profit and non-profit, with more personnel funds, less public funds, more indirect expenses, less direct expenses, uncoordinated cost structure ratio and various educational products, which objectively meets the application conditions of activity-based costing [2].

Third, private colleges and universities have developed rapidly in China, with the total number increasing and the competition fierce. The calculation of the average training cost of college students based on activity-based cost management is mainly based on the various resource consumption in the process of training students in colleges and universities. The process of resource consumption is re-examined from the perspective of activity-based management, and the average training cost of college students is quantified by using activity-based cost method, which can more accurately calculate the average training cost of college students [3].

# 2. Private colleges and universities to apply activity-based costing steps

The idea of cost calculation of activity-based accounting is: products consume activities, activities consume resources, and production costs should be collected into activities according to their causes, and activity costs should be calculated, and then activity costs should be included in product costs according to the amount of activities consumed in product production, that is, resource-based

products.

### 2.1 Determine the object of cost calculation

Before using activity-based costing to calculate the cost, we must first make clear the purpose of import and determine the object of cost calculation. The object of cost calculation refers to the products that bear the cost in order to collect and distribute the expenses in the cost accounting process. The product of colleges and universities is talents, so students should be taken as the object of cost accounting. However, there are obvious differences in educational expenses among different departments, majors and training levels. Therefore, it is reasonable to distinguish students by college (department), specialty and training level, and to calculate the total cost of education and the average cost per student respectively.

#### 2.2 Determine the operation and operation center

The production process of private colleges and universities is a functional parallel structure. Homework in private universities can be divided into two categories: main homework and supporting homework. The main homework refers to various institutions and processes directly related to educational activities, and supporting homework refers to the homework contained in various departments and auxiliary departments and processes that serve personnel training.

After job identification, we must weigh the relationship between the accuracy of cost information and the measurement cost, merge several related jobs to establish a job center, and collect the job costs in the job center to form a homogeneous cost library, forming several main job centers and supporting job centers. Only one representative activity driver is selected for each activity center to allocate the activity center cost. Support job is to maintain the normal operation of the main job, so the cost of support job should be allocated to the main job center according to the cost driver [4].

#### 2.3 Clear all resources consumed in the process of cultivating talents

The resources consumed by private colleges and universities in the process of cultivating talents include direct resources and indirect resources. Direct resources are all kinds of expenses directly used for teaching and students, mainly including student expenses and teaching expenses, Indirect resources refer to the expenses indirectly used to train students, mainly including teaching auxiliary fees, teaching management fees and administrative management fees. These indirect resources are shared by different cost objects, which need to be collected or allocated to the job first, and then allocated to the cost calculation object according to the job driver.

#### 2.4 Confirm resource drivers and allocate resources to jobs

Resource drivers refer to the ways and reasons that various resources are consumed by operations. Resource consumption is allocated to different operations according to specific resource drivers. For the resources consumed by activities, some are direct expenses that can be directly included in the activity cost, and some are indirect expenses that need to be allocated to the activity cost according to the resource driver. Take daily teaching as an example, daily education includes basic course education and professional course education. The educational expenses incurred by professional courses can be directly attributed to the operation center of a department for expenditure. The educational expenses incurred by basic courses usually adopt the teaching form of multiple major courses, and the teaching expenses can be included in each operation center only on the basis of distribution.

# 2.5 Confirm the activity motivation, allocate the activity cost, and calculate the total cost and average cost of different educational products

Activity motivation refers to the way and reason why each activity is consumed by the ultimate product or service, and it is a concept used to show the relationship between activity consumption and output. After the resource expenses are collected on the corresponding homework according to the resource drivers to form the activity-based cost library, it is necessary to allocate the expenses to students of all majors and levels according to their respective homework drivers. The total cost of the costing object can be obtained by adding the indirect cost allocated to the costing object by the activity-based costing library and the direct cost traced directly. The average education cost per student at a certain training level of a major should be: the total cost of the training level of the major divided by the number of students.

#### 2.6 Preparation of cost statements, cost analysis

Prepare accounting statements for the total cost of education and the average cost of students at all levels of training in all majors to comprehensively reflect the education cost of the school. At the same time, the author uses certain methods to analyze the formation process and final results of education costs. Through the analysis of cost statements, so that schools can define the

percentage of each type of cost and total cost, and provide the possibility to fundamentally solve the problem of "product" cost control and reduction.

# 3. Problems needing attention in the application of activity-based costing

### 3.1 To get the support of senior school leaders and faculty

Activity-based costing is a complex system, which needs to analyze, confirm and measure a large number of activities and corresponding cost drivers. Therefore, a lot of investment is needed in the initial stage of implementation, and the cost effect of activity-based costing is not effective immediately. Senior leaders of schools should see that the application of activity-based costing will fundamentally optimize school resources and reduce education costs, which will be a long-term process. Therefore, it must be recognized and supported by leaders and faculty.

## 3.2 The principle of cost-benefit should be followed

In the process of carrying out activity-based costing, schools should always have a clear goal as a guide, and must make a good balance between accuracy and complexity. The more detailed and accurate the cost information, the more complex the activity-based costing system will be, and the higher the cost of building and maintaining the system. If the practice of controlling costs increases the cost instead, it will not be worth the loss.

# 3.3 The participation of professionals and relevant grass-roots departments is required

Activity-based costing is subjective. For example, different accountants will have different results in the confirmation of activities, the selection of cost drivers and the confirmation of homogeneous cost pools, which sometimes leads to great deviation from reality. Professionals grasp the basic steps and principles in the theoretical framework and implementation process of activity-based costing more accurately. Moreover, the successful experience of some professionals can greatly shorten the time spent on the implementation of activity-based costing.

#### 4. Conclusion

Activity-based costing embodies the new thinking of "process management", which deepens the "activity-based" process of private colleges' costs and realizes the dynamic management of private colleges' costs. Only by enhancing cost awareness, strengthening cost accounting and control, scientific management, optimizing the allocation of school resources, reducing the cost of running schools and improving the efficiency of running schools can private colleges and universities continue to develop and grow in the tide of educational reform.

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