Research on Performance Evaluation of College Financial Accounting Application Talents Cultivation Based on Analytic Hierarchy Process

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Abstract: The thesis establishes the level of the teaching staff, the students' participation in the work, the practice curriculum construction, and the teaching reform evaluation system for the financial accounting personnel training performance results, and objectively evaluates the performance of the financial accounting talents in the four local universities. The results of the thesis found that the current financial accounting talents in the university have a limited number of project declarations and teaching reforms, and there are not many developments in applied teaching methods. The examination methods are mostly used in paper-based answering methods, and the proportion of students participating in accounting work after graduation is not high. There are problems in terms of quantity and so on. The paper puts forward corresponding solutions to the above problems. I hope that I can make suggestions for the training of financial accounting talents in colleges and universities.

1. Introduction

Popularized higher education must achieve coordinated development of the number and quality of personnel training. The quality of talent training in China's higher education after the expansion of enrollment has been widely concerned by the society. In the final analysis, the cultivation of talents in colleges and universities is the question of the mode of training talents, that is, the question of "what kind of people to train" and "how to train people." There is no universally accepted definition of the talent training model [1]. Different scholars also have different views on its constituent factors. For example, the talent training model includes the personnel training objectives, education and teaching concepts, training programs, curriculum, teaching methods, evaluations, etc. [2]; the talent training model consists of the target elements, content elements, and method elements [3]; the talent training model includes Basic education links such as classroom teaching, campus culture, and social practice [4].

With the development of intelligent robots, the accounting industry has entered the era of automated accounting. Therefore, the talents cultivated for colleges and universities may be replaced by machines. In order to promote the training of accounting talents in colleges and universities, it is necessary for educational institutions to design a performance evaluation system for the application of accounting talents in colleges and universities. Therefore, based on the actual situation, this paper designs indicators from four aspects: the level of teachers, the participation of students, the construction of practical courses, and the reform of teaching, and conducts research and evaluation on four universities. In order to get the problems existing in the training of applied talents in colleges and universities and propose feasible solutions.

2. Construction of cost-benefit analysis and evaluation index system for enterprise carbon emissions

The evaluation of the performance evaluation index system of accounting application talents in higher vocational colleges. The main contents of the performance evaluation indicators of accounting

application talent training in higher vocational colleges include the level of teachers, the participation of students, the construction of practical courses, and the teaching reform.

2.1 Faculty level

According to the education level, practical experience, awards and the situation of the students, the evaluation indicators of this indicator system are designed. Specifically, the level of education is reflected in the number of masters and above in the school. The practical experience is reflected in the average of several years of practical experience [5]. The purpose is to find out whether the practice level of a school is high enough, so as to promote the application ability of accounting majors in higher vocational colleges and lead students to participate in practical activities. The awards are reflected in the number of colleges and universities that have been rated as excellent teachers at the provincial level and above. The situation of leading students is reflected in the number of times that college tutors lead students to participate in various practical work.

2.2 Students participate in work

It mainly includes the proportion of students participating in work after graduation, whether the school has a practice base, the proportion of students who follow the accounting work, and the proportion of students who find jobs through the school. Specifically, the higher the proportion of students who work after graduation, the higher the first employment rate. If the school has a practice base, students can contact the other unit during the internship and use the practical tutor system to make the students understand more internal structure of the company and the tension that may be faced at work. Therefore, we will cherish the practice opportunities even more. In order to increase the employment rate, the school encourages students to work in other areas, such as sales. However, this does not reflect the goal of cultivating accounting students in higher vocational colleges. The purpose of setting this indicator is to find out whether students trained in higher vocational colleges are involved in accounting work. The higher the proportion of students finding jobs through the school, the more the school plays a role in helping students [6].

2.3 Practice Course Construction

It mainly includes the number of practical courses, the average time of practical courses, the situation of hiring practical tutors, and the ratio of students' practical courses to design evaluation indicators of this indicator system. If each major has a practice class, it will be very beneficial to improve the students' accounting ability, such as setting up taxation practice class, ER P system course, sand table course, etc. These courses can greatly promote students' hands-on application ability. Whether the school can hire better and more practical tutors is crucial to the application of accounting talents. The higher the student practice pass rate, the student's practical activities are not only recognized by the teacher, but also by the practical tutor.

2.4 Teaching reforms

It mainly includes the number of application-to-teaching reform projects, the development of applied teaching methods, whether the examination form is reformed, and the number of new teaching projects developed. Some schools have developed software operation courses. As long as they complete a large accounting case in a specified time, they can get course credits, which requires students to have higher hands-on ability and promote the application of students. In addition to traditional accounting, finance, and auditing courses, schools can develop new teaching programs for the development of students' hands-on skills. The specific indicator system is shown in the figure below.

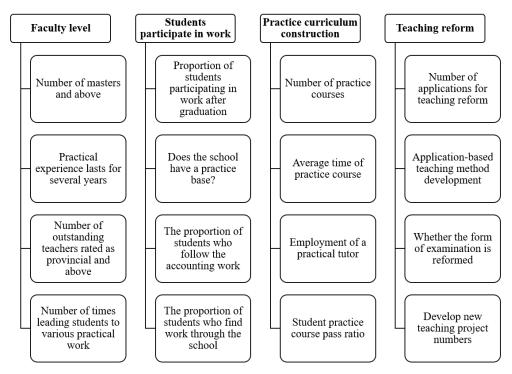


Figure 1. Design of performance evaluation indicators for the application of personnel training in colleges and universities

3. Application of Analytic Hierarchy Process Evaluation Index System

Afterwards, four questionnaires were filled and feedback was given to the leaders of the seven educational institutions and the first-line teachers engaged in accounting teaching. Finally, the relative weights of the performance evaluation index system for the application of accounting talents in colleges and universities were obtained. Furthermore, in order to verify the correctness of the weights of the performance evaluation indicators for the application of accounting in colleges and universities, this paper will also give weights to relevant experts to confirm and use the consistency of the indicator system. Finally, based on the university's accounting application talent training performance evaluation index system, this paper measures the value of college accounting application talent training index.

Assuming that the element B of the previous layer is used as a criterion, it has a dominant relationship with the elements B1, B2... Bn of the next level. The establishment of the judgment matrix is to assign the corresponding weights of B1, B2... Bn according to their relative importance under criterion B, that is, to repeatedly weigh the importance of criterion B, the two elements B1 and B2, and here we need to use the 9-point ratio [5]. The scale assigns importance to importance. If the factor i is compared with j by a_{ij} , the factor j is compared with i and judged as $1/a_{ij}$. The consistency test is performed on the evaluation results using the formula (1), and the formula is as follows.

$$CI = \frac{\lambda_{\text{max}} - n}{n - I} \tag{1}$$

Then determine the indicator weights, there are formulas as follows.

$$\overline{w}_i = n \sqrt{\prod_{j=1}^n a_{ij}} \qquad (i = 1, 2, 3..., n)$$
 (2)

Then, the normalized judgment matrices are added by columns according to formula (3), and then the entire column vector is normalized to obtain the normalized relative importance of the elements relative to the upper layer criterion.

$$w_{i} = \frac{\overline{w}_{i}}{\sum_{i=1}^{n} \overline{w}_{i}} \qquad (i = 1, 2, 3..., n)$$

$$(3)$$

Calculate the weight of each dimension of the criteria layer relative to financial performance, and obtain Table 1.

Table 1. Performance judgment matrix and weight of accounting talent application in colleges and universities

A	B1	B2	В3	B4	W
B1	1	1/2	1/2	4	0.25
B2	2	1	3	1/2	0.35
В3	2	1/3	1	4	0.21
B4	4	2	1/4	1	0.19

By analogy, the secondary indicators can be used to derive the weight of each level of indicators relative to the upper level indicators. The weights of the financial evaluation system are as follows.

Table 2. Analytic hierarchy process to determine the weight of each indicator

Criteria layer	Weights	Indicator layer	
Faculty level (B1)	0.2	Number of masters and above (B11)	
		Practical experience lasts for several years (B12)	
		Number of outstanding teachers rated as provincial and above (B13)	
		Number of times leading students to participate in various practical work (B14)	0.145
Student participation in work (B2)	0.35	Proportion of students participating in work after graduation (B21)	
		Does the school have a practice base (B22)	
		The proportion of students who follow the accounting work (B23)	
		The proportion of students finding work through the school (B24)	0.15
	0.16	Number of practice courses (B31)	
Practice course		Average time of practice course (B32)	
construction (B3)		Employment of a practical tutor (B33)	
		Student Practice Course Pass Rate (B34)	
	0.12	Number of applications for teaching reform (B41)	
Teaching reform		Application-based teaching method development (B42)	
situation (B4)		Whether the form of examination is reformed (B43)	
		Develop new teaching project numbers (B44)	0.16

Table 3. Consistency Checklist of Performance Evaluation Indicators for Accounting Application of University Accounting

Criteria layer	λmax	C.I	R. I	C.R
Criteria layer 1 University accounting application talent training refinement indicator scale	3.412	0.001	0.721	0.003
Criteria layer 2 practice curriculum construction situation refinement indicator scale	3.543	0.005	0.643	0.006
Standard level 3 faculty level refinement indicator scale	3.321	0.003	0.656	0.007
Criteria layer 4 resource allocation marketization indicator refinement indicator scale		0.003	0.576	0.009
Criteria layer 5 teaching reform situation refinement indicator scale	3.447	0.008	0.598	0.008

4. Discussion of results

Through the analysis of the results of Table 1-3 above, it is found that the index value of the

faculty level index is the largest, followed by the index values such as the practice curriculum construction, student participation in work, and teaching reform. This is because the reasons for the poor index value of the teaching reform are as follows: First, the number of applications for teaching reform is small, especially the number of provincial-level projects is almost no, indicating that the teaching research results of universities are not generally recognized by the Department of Education. Nor can it motivate teachers to develop courses and promote the continuous development of applied accounting talent training courses. Second, there are not many application-based teaching methods developed, which cannot promote students to learn accounting knowledge and increase hands-on ability. Generally speaking, universities only have the ability to operate ER P software. However, business learning such as tax filing has not been held, and students' ability to learn independently cannot be generally improved. Third, the examination method uses the commonly used paper answering method, which cannot cultivate students' practical learning ability. Even if some schools develop software operation courses, they are mainly based on paper examinations, which is not conducive to promoting the application of students. The reason for the poor participation index of students participating in work is that on the one hand, the proportion of students participating in accounting work after graduation is not high. The training of accounting talents in colleges and universities has not been welcomed by the market, and the goal of training accountants in higher vocational education has not been completed. The institutions set up colleges and universities to meet the employment training needs of accountants. On the other hand, due to the small number of practice bases in colleges and universities, students can rarely conduct internships through the school's base, and they can contact the other units in the realization, and they cannot use the practical tutor system to make students understand more internal structure of the enterprise.

5. Countermeasures and recommendations

Firstly, the education department should increase the training of educational reform programs in colleges and universities. At present, the number of colleges applying for educational reform projects is small, which leads to the lack of teachers' motivation for teaching reform, and is also not conducive to students' ability to practice teaching. Therefore, the education department can increase the training of educational reform programs in colleges and universities, thereby promoting the cultivation of applied accounting talents in schools. Secondly, the development of applied teaching methods. Generally speaking, universities only have the ability to operate ER P software. However, business learning such as tax filing has not been held, and students' ability to learn independently cannot be generally improved. Therefore, it is necessary to open more courses with higher requirements such as tax filing, so as to improve students' practical ability. Thirdly, the reform of the examination method. Large-scale case-answering methods can be adopted to increase students' hands-on ability and promote students' understanding of knowledge. Fourthly, increase the base of accounting practice. There are fewer accounting practice bases, which makes it impossible for students to participate in accounting, tax filing and other businesses in the practice base. Therefore, the accounting practice base can be increased, which not only can cultivate students' practical ability, but also increase the proportion of students who participate in accounting work after graduation.

References

- [1] Long Yuexi. The Realization Path of Accounting Undergraduate Talent Cultivation in Chinese Universities. Finance and Accounting, Vol. 1 (2017) No.14, p. 61-62.
- [2] Chen Ying, Lin Mei, Wu Haiping. Research on the Cultivation of International Accounting Talents—Based on the Perspective of Universities and Enterprises. Heilongjiang Higher Education Research, Vol. 10 (2015) No.12, p. 137-139.
- [3] Cui Xiaoli. Problems and Suggestions on the Financial Information Disclosure of Universities Directly Under the Ministry of Education. Finance and Accounting, Vol. 11 (2018) No.24, p. 25-29.
- [4] Wang Xia, Wang Yun. Analysis on the Construction Background and Path of Talent Cultivation

Model in Colleges and Universities. China Adult Education, Vol. 4 (2016) No.11, p. 60-62.

- [5] Yang Wei, Gu Xiubin, Xiao Wei. Research on Talents Training Model of Colleges and Universities in China during the Transition Period. Heilongjiang Higher Education Research, Vol. 3 (2015) No.42, p. 17-19.
- [6] Liu Xiangcheng. Exploration of Accounting Teaching Model in Colleges and Universities under the Position of Applied Talents Training. Education and Occupation, Vol. 1 (2016) No.15, p. 57-62.