Teaching Reform of Accounting Theory and Practice

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Abstract: With the improving of the our country economy level and rapid development of relevant accounting related work is becoming more and more popular, accounting has become a hot major, at present our country's colleges and universities have set up accounting, every year the number of learning accounting professional rising, and appeared many cross major students study accounting phenomenon. Accounting includes two parts: theoretical knowledge and practical teaching, in which accounting theory is the basis of accounting study, and practice is based on accounting theoretical knowledge. The two must be well integrated together, so that learners can meet the qualified standards of accounting practitioners. However, there are many problems in the current accounting education, which have a negative impact on the training of high-standard accounting personnel. On this basis, this paper analyzes the current status of the accounting industry, on the basis of data fusion algorithm, the accounting theory and practice of teaching put forward relevant Suggestions. This will foster a higher level of accounting practitioners and promote the future economic development has a positive role in promoting.

1. Introduction

With the development of China's socialist market economy and the promotion of its position in the world economy, China's accounting theory and practice teaching should be coordinated with the current economic development and consistent with the socialist market economy [1]. This involves the reform of accounting, including the content of accounting subject, the arrangement of relevant accounting courses and the change of teaching methods. Accounting means that on the basis of currency calculation, relevant technologies and algorithms are used to comprehensively supervise and calculate various economic phenomena and activities, with the ultimate goal of improving the economic profits of countries, units and individuals [2-3]. Accounting consists of two main parts, accounting theory and accounting practice, both of which cannot be ignored. Only by taking both into consideration can the cultivated accounting talents meet the requirements of social development, which requires that in the process of accounting teaching, accounting theory and practice teaching should be well integrated to improve students' comprehensive accounting quality [4-5]. In a word, the cultivation of comprehensive high-quality accounting talents is related to the future development of China's economy.

However, in today's society, the exploration of basic accounting theories and the implementation of practical work, and even the education status of the whole accounting industry, are not in line with the current rapidly developing economic situation, so there are many problems [6]. The emergence of these problems is closely related to the cultivation of accounting talents by accounting education and teaching. At present, there is a serious separation between basic theoretical knowledge and practical teaching in China's accounting education and teaching, which leads to the current accounting professional learners' lack of theoretical basis, practical ability and comprehensive quality [7-8]. Therefore, it is difficult to adapt to the growing demand of the accounting industry. Therefore, only accelerate the reform of accounting education and teaching, in order to fundamentally solve these problems. At present, many scholars at home and abroad have

conducted a lot of research on the reform of accounting education and teaching, mainly focusing on the reform of accounting teaching methods and teaching contents. However, there are relatively few researches on the integration of accounting theory and practice teaching, and there is a theoretical gap to some extent [9-10].

In order to make up for the gap, this article in view of the current accounting theory and practice teaching, has carried on the simple analysis of the current situation of slit has been clear about the current accounting theory teaching and practice teaching, and on the basis of teaching data using the data fusion algorithm for the comprehensive treatment, based on this, advances will integrate the accounting theory and practice teaching Suggestions. This is conducive to the cultivation of comprehensive high-quality accounting talents and promotes the sustainable development of the accounting industry [11-12]. At the same time for the future accounting theory and practice teaching reform related research provides a certain theoretical basis.

2. Method

2.1 Current Situation of Accounting Theory and Practice Teaching

(1) Current situation of accounting theory teaching

Accounting theory teaching belongs to basic theory teaching. Usually teachers as the specific teaching environment, accounting knowledge learning is limited in a narrow space. This makes many students unable to deal with the actual accounting work flexibly. Many studies have also proved that although most accounting major students have learned a lot of theoretical knowledge and achieved excellent theoretical results, they often find it difficult to get started in practical accounting work and cannot solve the difficulties in work. At present, there are various examinations for accounting majors, so schools often take students' examination results as the standard to measure, but ignore students' actual working and practical ability, which makes accounting theory teaching and accounting work disconnection.

(2) Current situation of accounting practice teaching

The concept of accounting practice is a series of coherent actual control activities from the acquisition of original documents by each unit to the processing of account data, statement analysis and so on. Accounting practice teaching often takes enterprises and other entities as the teaching environment, which is more extensive. Although I got rid of the limitation of theoretical teaching, there were many problems in teaching. With the practical accounting practitioner as the teacher to teach students, although students have the practical application ability of accounting, but lack the guidance of relevant theoretical knowledge, students lack the correct understanding of these practical operations, students' migration ability is weak.

Because in the daily accounting teaching, there are many differences between the two, so often appear two kinds of teaching content split phenomenon. This poses a threat to the sustainable development of the accounting industry and is not conducive to the cultivation of qualified accounting talents. Therefore, it is necessary to integrate the two in order to achieve teaching integration and give consideration to both in teaching.

2.2 Data Fusion Algorithm

Data fusion is can carry on the comprehensive treatment to the relevant information of a technology, is built on the basis of many traditional disciplines and new subject, which includes the technology of many traditional disciplines, such as communications, signal processing, pattern recognition, decision theory and optimization technology, and even in recent years of artificial intelligence and neural network computing technology. Relevant algorithms of data fusion are developed on these bases, such as bayesian algorithm, SVM algorithm and so on. So let's talk a little bit about these algorithms.

Bayesian method is often used in data fusion algorithm. This algorithm USES conditional probability to represent measurement unpredictability, and then carries out probability checking calculation with the aid of bayesian inference. The specific formula is as follows:

$$P(X = x) = \sum_{i=1}^{n} P(Y = y_i)P(X = x \mid Y = y_i) \tag{1}$$

The difficulty of bayesian algorithm is relatively moderate, but it requires that all assumptions are free from interference, prior probability and conditional probability should be listed first, and it needs a lot of time to calculate all probability to ensure the accuracy and consistency. Based on the confidence distance theory, a data fusion method based on bayesian estimation is proposed to deal with the measurement data of the same parameter for the same type of teaching.

SVM algorithm is a machine learning and pattern classification method based on statistics and structural risk minimization. It USES the nonlinear transformation defined by kernel function:

$$\gamma = y(w^T x + b) = y.f(x) \tag{2}$$

The original feature space is dimensionally augmented to find the optimal linear classification interface in the high dimensional space. SVM algorithm can solve the problems of small sample, non-linear and high dimension, but the training sample is also limited.

3. Experiment

Step1: questionnaire survey and sample extraction. The questionnaire includes three aspects: teachers, students and accounting practitioners. It involves the investigation on the current situation of accounting theory and practice teaching, mainly including accounting teaching methods, teaching methods and teaching environment. The purpose of the questionnaire survey is to fully grasp the problems existing in current accounting teaching. Better propose solutions and Suggestions. Under the current situation of accounting teaching, students with the same learning level are selected as experimental samples to ensure the consistency of experimental samples.

Step2: sample grouping and experiment. The students are divided into two groups: traditional accounting teaching group and experimental improvement teaching group. The traditional teaching group does not change the original teaching method, the experimental group changes the teaching method, combines the study and the practice research. The above algorithm is applied to analyze and process the sample data to ensure the scientific and accurate experimental results.

Step3: result sorting and analysis. After a period of time, a comprehensive test of accounting industry was conducted on different groups, which included both theoretical test and practical test. Record the results of each group and arrange the relevant data. According to the analysis of the data, it is concluded that the traditional teaching method of separating accounting theory and practice has a serious impact on the accounting industry.

4. Discuss

4.1 Experimental Results and Analysis

Through experiments it is easy to find, the traditional accounting teaching makes untethered from theory and practice, in this kind of teaching mode both theoretical knowledge and practical skills to master, and even the comprehensive learning effect are all in the position of the low, far behind the integration of theory and practice teaching effect, the specific experimental results data as shown in table 1 and figure 1, data is the sorting the results of the experiment.

Table 1. Experimental index data results

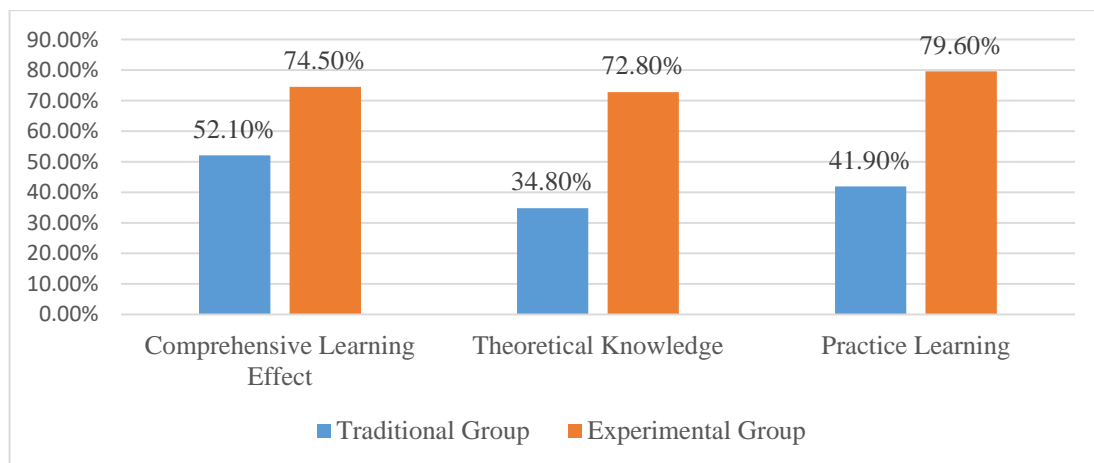|	P	Y	Weighted Score	Score
Theory Level	76	95	40%	87
Practice Level	75	91	30%	83
Comprehensive	64	84	20%	79
Final score				85.5
*Data came from the experimental collation				

Figure 1. Comparison of experimental data of traditional teaching and teaching integration

4.2 Suggestions on the Integration of Accounting Theory and Practice Teaching

(1) Theoretical teaching based on practical teaching

Establish students' knowledge of the enterprise. In order to enable students to work quickly after finishing their studies, teachers should pay attention to guide students to deepen their understanding of enterprises and the accounting industry in daily teaching. With a deep understanding of the accounting industry and related enterprises, on the one hand, students can have a deep understanding of accounting knowledge, promote students to have a deeper understanding of accounting knowledge. On the other hand, it can stimulate students' learning interest and increase their learning motivation. As for the selection standard of enterprises, the specific measurement index should be based on the professional large scale, so that students can feel the charm of professional large scale enterprises, further understand the daily contents of accounting work, and lay a solid foundation for future accounting work. At the same time, it also promotes the understanding of work flow, which is a concrete way to integrate accounting theory and practice teaching.

(2) Practical teaching based on professional accounting theory

Accounting is extremely complex and involves many aspects of knowledge. Only from the textbook it is difficult to master all the skills of the accounting profession, if only based on teaching materials, this way to cultivate the accounting personnel is also bound to be unqualified, sooner or later will be eliminated by the society,. Therefore, it is emphasized to integrate practical teaching into accounting theory and support practical teaching with accounting theory. For example, students can use the form of simulation exercise to get in touch with enterprise accounting work and deepen their familiarity with accounting work.

(3) To scientific guidance as the criterion, the accounting theory teaching content and practical teaching integration

When teaching accounting, teachers should break through the traditional teaching methods, closely link the theoretical knowledge of accounting with the practice of training, as much as possible with the actual content. This requires teachers to master the key and difficult points of accounting knowledge before teaching, and help students understand the difficult theoretical knowledge by practical teaching. First, the theoretical knowledge is deconstructed, the students discuss and study, and the teacher gives the final explanation.

5. Conclusion

In recent years, China's rapid economic development has greatly promoted the development of China's accounting industry. At present, there are more and more relevant researches on accounting major, which represents that there are still many problems in China's current accounting education, which need to be solved urgently. It is not difficult to solve the problem. In accounting teaching, the theoretical education and practical education of accounting should be infiltrated, and the theoretical

and practical education should be taken into account to realize the integration of teaching, so that students' practical working ability can be improved when they learn the theoretical basis. In this way, to cultivate high-quality qualified accounting talents.

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