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The Design and Practice of Mixed Teaching Mode Guided by Spiritual Quotient

Taking Management Accounting as an Example*

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Abstract—Mixed teaching has become an important model of today's teaching reform. The author uses the "Rain Classroom" teaching platform and takes the Management Accounting as an example to study the reform design of the mixed teaching mode guided by spiritual quotient. From the course design to the course development, implementation, evaluation and other links, comprehensive consideration is given to cultivating students' information technology ability, career adaptation ability, expression and display ability, communication and coordination ability, and innovation and entrepreneurship ability. Through the investigation and analysis of students' learning effect, the rationality of curriculum reform has been tested. The results show that the mixed quotient mode guided by spiritual quotient fully considers the characteristics of the "post-2000s" generation, improves the students' initiative and significantly improves the students' five abilities.

Keywords: spiritual quotient, Rain Classroom platform, mixed teaching mode, curriculum reform

I. INTRODUCTION

As technology such as the big data and AI picks up, some low-skill jobs will be replaced by machines. The BBC reported in 2015 that the probability that financial staff and accounting technicians being replaced by automation in the next 20 years is up to 96%. The emergence of cloud computing, the birth of financial robots, plus the efficient and low-cost operation of financial shared service centers will have a profound impact on China's management accounting industry, and the accounting industry practitioners are facing the transition from financial accounting to management accounting. The new mode of financial intelligence technology requires accounting educators to pay attention to the training and reform of talent education, and cultivate application-oriented talents with innovative spirit and international vision that can fit the development of new technology. However, the research on accounting education

*Fund: The work was supported by Teaching Reform and Practice Project of Guangdong Province in China. (Project No.: GDJG2019306) in the world is stagnant. There are some problems, such as limited research topics, few empirical papers, single empirical method and little contribution to accounting education. (Rebele and Pierre, 2015) Accounting education in Chinese universities has entered the era of mass education (Pan Maoyuan and Xiao Haitao, 2008), which is divided into general college education, general undergraduate education, postgraduate education and doctoral education. According to statistics, among the accounting graduates in 2017, there were 450,000 with general college education, 250,000 with general bachelor's degree, 10,000 with master's degree, and about 260 with doctor's degree. The number of general college graduates accounted for about 63% of the total. As the product of specific environment, accounting is bound to be affected by related environment and environmental changes (Luan Fugui, 2013; Yuan Zeming, et al., 2013). This pyramid model is bound to feel the punch of artificial intelligence, big data and so on. The traditional accounting personnel must face the post transformation, that is, the transformation from application-oriented traditional financial accounting to management accounting that requires comprehensive ability, which has posed an impact on the traditional position of accounting major in higher vocational colleges: training basic skilled talents.

National **Vocational** Education Implementation Plan which came into effect in 2019, launched trials of the 1+X (academic certificate + vocational skill level certificate) system, promoting the transformation of school-running patterns from general education to type education, and building a number of higher vocational schools and key specialties with Chinese characteristics and at a world level, (Chen Baosheng, 2019) which has injected new impetus into the rapid development and reform of vocational education. If the current vocational education of accounting still follows the original training mode, the cultivated students will inevitably face difficulties in employment, promotion, schooling and other problems in the near future, which runs counter to the guidance of building higher vocational schools and flagship majors with Chinese



characteristics and world standards. Therefore, accounting educators must actively explore the training orientation, training mode, curriculum system and teaching methods of accounting specialty education in China under the new situation, so as to promote the transformation and upgrading of the training orientation of higher vocational accounting talents in China.

Spiritual quotient is an ability proposed by Emmons (1999) to deal with daily problems and achieve goals with the proper use of mental resources. Spiritual quotient is the ultimate wisdom of human beings. It contains flexibility, judgment of right and wrong, discrimination of truth and falsehood, etc., is free from conservative ideas, organizational boundaries and program modules, and represents correct professional outlook and values. Spiritual quotient is related to people's ability to deal with comprehensive relationship problems. Its importance and application value have been proved and further studied (King, 2002; Ashmos and Duchon, 2000; Zohar and Marshall, 2000; Emmons, 2000; Vaughan, 2002; Wigglesworth, 2006; Nokelainen, et al., 2006; King, 2009; Kumar and Mehta, 2011), and its application in many fields, such as health care, enterprise and education, has been effective. (Wang, et al., 2007) The accounting education of spiritual quotient is an extension of the traditional accounting education theory from a new perspective, which cultivates accountants with comprehensive quality and innovation ability. It was Wu Aili and Wang Kaitian who first proposed spiritual quotient education in the field of accounting education in China (Wu Aili and Wang Kaitian, 2014). The ultimate goal of education is to perfect human beings, so that human beings, as social beings, can better play their role after entering the society, so as to promote the continuous progress of the society. (Bu Danlu and Hongyi, 2017) Accounting education of spiritual quotient serves as the driving force to promote the cultivation of accounting talents. (Wang Kaitian and Hu Xiaoming, 2018) Post-2000s college students have a variety of ideological and behavioral characteristics, such as strong subjective awareness of "egoism", self-definition of "creative person", "diversified" value orientation, "touch screen" behavior expression, etc., presenting the characteristics of individuation, times and wholeness. (Lu Xiaoliang, 2019) The education of spiritual quotient in accounting coincides with the characteristics of students born after the year of 2000, such as openness and pursuit of personalized value. Therefore, accounting education of spiritual quotient focusing on innovation ability is more in line with the development trend of accounting education in the new period.

As the integration of accounting services and departmental business booms (business-finance integration), the functions of accountants shift from ex post accounting to real-time processing (Bhimani and Willcocks, 2014). The role of the accountant has shifted from traditional data collection, data validation and information reporting to value-added analysis of management decisions. Therefore, the training of accounting professionals should also be inclined to the training of management accounting. The Ministry of Finance made it clear in *Basic Guidelines for*

Management Accounting to promote the construction of management accounting personnel, and issued Application Guidelines for Management Accounting in the following two years. The foundation of the reform of accounting education is the construction of accounting teaching materials and the cultivation of accounting talents, which further promotes the research on the teaching material *Management Accounting* and teaching reform. The author hopes that students majoring in accounting in higher vocational colleges can obtain the academic certificate of accounting and vocational skill level certificate (Certified Management Accountant (CMA) or Junior accountant certificate) upon graduation, which is highly consistent with the "1+X" (academic certificate + vocational skill level certificate) system established by the Ministry of Education. Therefore, this paper takes the course of Management Accounting as the object of teaching design, and studies the reform of mixed teaching mode based on spiritual quotient. This not only conforms to the orientation transformation of accounting personnel training, but also conforms to the social development demand of promoting the management accounting reform in China.

The contribution of this study can be divided into two aspects. On the one hand, the author considers the widening gap between the accounting education and practice, the background of talent demand transformation, and the characteristics of the "post-00" generation, and designs the management accounting course with mixed teaching mode, which provides theoretical basis and application examples for the development of accounting education practice, and enriches the existing literature on higher vocational accounting education. On the other hand, it is the first time to integrate spiritual quotient into higher vocational accounting education, and preliminarily test the practical effect, which enriches the theoretical evidence of spiritual quotient in the application of accounting education. This paper combines the management accounting reform in time, carries on the reform to the curriculum and the teaching, closely follows the social and economic development trend to carry on the research, thus provides the new vigor for the higher vocational accounting education reform.

The specific teaching design is considered from two aspects: the first is the design of the mixed teaching mode of *Management Accounting* course based on the Rain Classroom platform and guided by spiritual quotient, and the second is the effect feedback and evaluation of instructional design. The structure of the paper is as follows: the second part is literature review, and the third part is theoretical basis and application. The fourth part is the creative path design of the training mode design and mixed mode teaching content of *Management Accounting*, followed by the feedback of teaching effect. The last part is the application considerations and concluding comments.



II. LITERATURE REVIEW

A. Research status of accounting higher education

Teaching research in higher education mainly refers to the research on teaching methods, teaching quality, educational technology, classroom learning, learning effect and other issues, exploring ways to improve students' learning efficiency and reasonable talent training model. (Liu Shengbo, et al., 2018) The accounting education reform is a global concern. (Nelson, 1995; Albrecht and Sack, 2001; Mohamed and Lashine, 2003; Chen, 2014) As the business environment becomes increasingly complex, the challenge for accountants is information technology analysis, the ability to extract valuable information from data (Dzuranin, et al., 2018). Andre and Smith (2014), IMA (2016), etc. proposed that accounting courses should be adjusted and information technology should be integrated into accounting course teaching (Ahmed, 2016) to cultivate students' soft power to adapt to changes, communicate and solve problems. Yuan Zeming, et al. (2018) also puts forward the path of accounting supply-side reform, which provides reference and inspiration for higher vocational accounting education reform. As China's The Belt and Road Initiative booms, Wu Aili and Wang Kaitian (2016) pointed out that accounting undergraduate and postgraduate education needs to use scientific teaching methods to cultivate high-quality accounting talents with global vision and international perspectives who can deal with various complicated accounting relationships. Accounting major accounts for a very large proportion in the whole higher vocational education. It is the purpose of accounting education to integrate industry and education, coordinate development with enterprises, and train professional talents who can better serve enterprises and social and economic development (Chen Baosheng, 2018).

Reviewing the literature of accounting education in recent 20 years abroad, the research on accounting education shows signs of stagnation (Moser, 2012; Rebele and Pierre, 2015). There are some problems such as the limited research topics of accounting education, the small number of empirical papers, the single empirical method and the little contribution to accounting education. In 2018, 101 papers were published in five major international journals of accounting education, with empirical articles accounting for 45%, up 6% from 39% in 2017. Among the empirical articles, 28 were about survey data, accounting for 61%, an increase of 8% compared with 2017 (Apostolou, et al., 2018; Apostolou, et al., 2019). It can be seen that the empirical category is the mainstream in the research of international accounting education literature, and the research on students and curriculum construction is the focus of foreign accounting educators. Although there are plenty accounting education studies in China, the empirical literature is much less than the normative literature. The focus is mainly on the talent training mode, teaching method reform, and the construction of double-first-class and double-advanced literature in recent years.

Karreman (2007) comprehensively summarized the five main factors influencing the change of global accounting education, including competitive pressure, the impact of information and technology, the globalization of enterprises, fair value accounting and the demand for new knowledge and skills, as well as the demand for improving corporate governance and ethics. Later scholars carried out further research on this basis. For example, Chen (2014) found that the reform of accounting education in English-speaking countries had something in common through the study of accounting education, which focused on cultivating general skills rather than professional skills. The goals of higher education in accounting in China are set according to the stages (junior college, bachelor's degree, master's degree, doctor's degree). (Bu Danlu and Guo Hongyi, 2017) Wang Kaitian and Hu Xiaoming (2017) integrated the concept of "three quotients and five qualities" into the accounting education in colleges and universities, providing a direction for current accounting education at the present stage. However, at present, there are many problems in the process of personnel training in higher vocational education of accounting, such as the lack of communication in the industry, the failure to meet the professional, open and strategic needs of accounting positions in the era of new Internet technology, and the "surplus" of accounting talents at the grassroots level.

B. Research status of accounting teaching mode

Over the past 40 years since the reform and opening up in 1978, the educational methods of accounting courses have undergone a radical change, from the "chalk and blackboard" stereotyped traditional model to modern advanced methods such as multimedia teaching, network teaching and case teaching (Liu Yongze and Chi Guohua, 2008). Due to the neglect of market factors in teaching content, students are not exposed to such highly relevant concepts as globalization and new technology in a correct way (Russell and Kulesza, 2000). Practical courses are lacking (Meng Yan and Li Ling, 2007), and the teaching model of school-enterprise-market interaction is not formed (Yang Zheng et al., 2012). Besides, students' classroom experience and after-class feedback are insufficient (Yuan Zeming, et al. 2018). The Pathways Commission on Accounting Higher Education (2012) put forward teaching mode as an important aspect in its reform proposal. With the development of information technology and artificial intelligence and the application of big data, mixed teaching mode has become an effective teaching mode, among which the promotion and use of MOOCs, online open classes, etc. have promoted the development of modern means of education.

C. Research status of management accounting education

The characteristic of management accounting is that practice comes first, and the disconnection between theory and practice is particularly prominent in the field of management accounting (Xiong Yanren and Su Wenbing, 2008). Through the practical test of five financial accounting textbooks, Wells (2018) found that there was a disconnection between the textbooks and accounting practice, and that



there was a problem of overlapping content between financial accounting, cost accounting and management accounting (Niu Yanxiu, 2002), and The pace of textbook updating lags behind the revision of the guidelines on the application of management accounting (Chen Jifeng, et al. 2013). In the teaching of management accounting courses, teaching methods to achieve more inclusive courses include (among other initiatives): case studies, service learning projects, and computerized business simulations (Ballantine and Larres, 2007; Jackling, et al., 2013). Zahller (2017) introduced the case of small business to guide students to learn the work cost method. Through case study, students are more impressed with knowledge and have better learning effect. Vesty and Brooks (2017) took st. George's hospital as a case to train students' ability of capital budget, performance measurement and other applications, and achieved good results. Wang Xueli and Bai Bing (2017) affirmed that case teaching is the direction of teaching reform, and case teaching can build a bridge between theory and practice for readers. The characteristics of management accounting determine that it is feasible to apply the mixed teaching mode to the course. The first is that management accounting has strong practicality, the traditional assessment method does not adapt to the course development. The second is that the content of the course is updated quickly, and the teaching process needs to fully consider the cultivation of students' spiritual quotient, so the traditional teaching methods cannot meet the requirements of the course. However, at present, online teaching, mobile classroom and so on are common, the construction of information curriculum is only limited to the diversification of presentation, and there is the suspicion of "valuing form over substance". (Liu Guocheng, Dong Birong, 2017) Xu Guanghua, et al. (2014), Cheng Ping and Ji Wei (2018) analyzed and predicted the development trend of management accounting in the era of big data. They hold that the service function of management accounting will be extended from the tactical layer to the strategic layer, and the data processing technology will be transformed from traditional technology to big data. Therefore, using modern information to reform the teaching model of management accounting is the inevitable trend of the times.

Big data is a new information technology means that can "turn chaos into reality" with accuracy and value. It is a mass, high-growth and diversified information asset with stronger decision-making power, insight and discovery power and process optimization ability. (Zhang, Yang, and Appelbaum, 2015; Janvrin and Watson, 2017) Such information asset has changed the accounting practice. Accountants begin to pay attention to the accuracy and value/cost benefit of data collection, and use big data to provide reasonable decisionmaking basis for enterprise operation. Cai Lixin and Li Biao (2016) believe that big data can accelerate the integration of financial accounting and management accounting, and the use of IT to integrate management accounting and financial accounting is the key to reflect the role of modern information accounting. The emphasis on big data education and the growing demand for graduates with data analysis skills have led to calls for more data analysis teaching in business degree courses (Dzuranin, et al., 2018). In order to

ensure that students use AICPA and AAA, it is clear in action project 4.1.6 that educators should focus on developing students' learning of current and emerging technologies and global business trends, and that big data has been integrated into curriculum resources (Janvrin and Watson, 2017). Since 2015, the two most important skills that students should master, spreadsheet grading and commercial awareness/analytics, are based on big data learning.

Through the comparison of international studies on accounting education, it can be seen that the research on accounting education in China is generally large in quantity, low in quality, and short of articles with practical guiding significance. At present, the educational research of management accounting is lack of specific innovative teaching design combining the characteristics of "post-2000" for reference, and the quality of educational innovation is the key factor determining information control and academic discourse power. (Wang Jiaming and Jiang Shangfeng, 2018) Therefore, based on the analysis of the existing literature, this paper combines the current opportunity of building firstclass vocational colleges, fully considers the learning characteristics of students born after 2000, and makes use of the modern information technology "Rain Classroom", takes the innovative mode of management accounting course mixed teaching guided by spiritual quotient as an example to explore the reform of course teaching.

III. THEORETICAL BASIS AND APPLICATION

A. Theoretical basis

At present, there are many studies on spiritual quotient abroad. Zohar and Marshall believe that spiritual quotient is closely related to 'meaning' and 'value'. The crisis of value loss in today is more than ever (Maslow, 2010). The core crisis of the moment is the failure to find greater meaning and value, and it is this crisis that "gave birth" to the theory of spiritual quotient (Wang Xiang, 2013). Nokelainen et al. (2006) kept exploring the testing dimensions of spiritual quotient until they finally identified the four dimensions of consciousness, mystery, value and group. Zhang Hong (2007) believes that spirituality affects individual values and lifestyles, and becomes an important force and source for coping with stress and events. Currently, Finland, the United States, Australia and other countries have carried out education on spiritual quotient. The research on the application of spiritual quotient in accounting education is still relatively few, which is extremely disproportionate to the status of accounting in the economic society and the social demands for accounting innovation. In particular, the downturn of spiritual quotient is an indisputable fact that people need to face up to now (Luo Kai and Wang Xiang, 2016). Wu Aili and Wang Kaitian (2014) discussed the education of spiritual quotient in accounting in China for the first time, and held that the core characteristics of spiritual quotient of accounting included four aspects: the migration, insight, innovation, and contingency of accounting. The application of spiritual quotient in the research of personnel



training, the modularization of curriculum, the integration of three classes, and the coordination of teaching and learning is aimed at solving the problem of the difference between the expectation and reality of accounting education.

B. Innovative path design of the mixed teaching model of Management Accounting integrating spiritual quotient

The design of course teaching content includes six modules from course preparation to course analysis, design, development, implementation and evaluation. (See "Fig. 1")

In the preparation stage of the course, it is necessary to determine an excellent team of teachers, position the training objectives, highlight the characteristics of the course, formulate the curriculum standards and arrange the platform design. This is followed by the analysis, design, development, implementation and evaluation phases of the course. Analysis and design are the prerequisite, and development and implementation are the core elements, evaluation runs through every link, is the guarantee of effective course. The five parts are interrelated and inseparable.

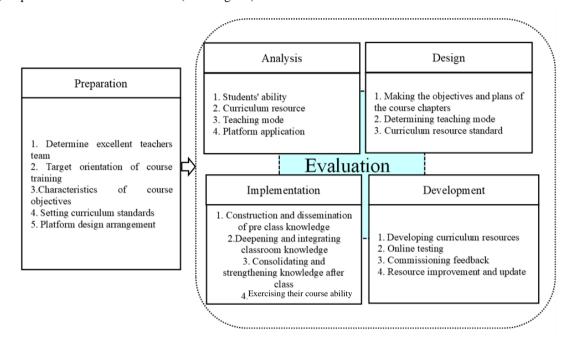


Fig. 1. The design of course teaching content.

The analysis includes the analysis of students' abilities, course resources and teaching modes, as well as the application condition of the platform. According to the principles of spiritual quotient (information technology ability. vocational adaptability, expression communication and coordination ability, innovation and entrepreneurship ability), the curriculum and students' abilities and characteristics are combined to determine the appropriate personalized talent training objectives. On the other hand, it is necessary to determine the teaching resources of management accounting and use the platform to design the mixed teaching mode. The course design phase involves the formulation of the objectives, plans and standards of course resources. Then, it's the turn to the course development phase. The collected classic cases of management accounting across the world and enterprise cases can be used for making course videos, exercises, preparing courseware before class, summarizing materials after class, question banks, etc. Teachers conducted online tests in advance through the online platform of Rain Classroom, and further improved the test results through feedback. The predictive test is followed by the course implementation phase. Teachers will push videos, exercises

and preview courseware to students' mobile phones before class, and use the online platform to set reminders, collect preview, review and other functions to effectively guide students to communicate with teachers online and give feedback. In class, the mixed teaching mode is fully utilized. Real-time answer, barrage interaction, screen casting and other functions are utilized to fully arouse students' enthusiasm, arouse their interest in learning and improve learning efficiency. In addition, learners should be encouraged to participate in the learning process to improve their state in the learning process. After class, feedback from each part is received through the analysis and evaluation stage and the system is timely optimized to adjust the learning pace of learners and improve their learning initiative (Gagne and Briggs, 2007). For example, the team should be encouraged to complete case analysis, communication and discussion, etc., so as to improve spiritual quotient. Management accounting competitions should be held regularly on campus, and students should be encouraged to participate in national management accounting skills competition, enterprise management simulation competition and entrepreneurship competition to further improve students' comprehensive spiritual quotient.



IV. FEEDBACK ON IMPLEMENTATION EFFECT

A. Preliminary implementation effect

The five abilities of the blended teaching model with the goal of cultivating spiritual quotient promote each other. In order to test whether there are any defects in the curriculum design, the teachers participating in the design and a randomly selected class were tested and interviewed in advance. After a one-week test of selecting one chapter of variable cost method, it was found that the completion rate of preview before class was high with the use of Rain Classroom, and students were able to actively collect related materials of the course and improve their information technology ability. During the discussion, students used the knowledge they had mastered before class to think and analyze problems, which significantly improved their classroom participation and activity. More students actively participated in the study, forming an active teacher-student interactive classroom model. Through role-playing in cases, students can develop their professional adaptability in a more real way. Their enthusiastic participation and reporting in class have fully exercised their ability of expression, presentation, communication and coordination. After class discussion, students can reflect on and analyze their own learning process and strategies, actively participate in afterclass team work and task cooperation, and further exercise communication and coordination skills and team spirit. Therefore, the preliminary curriculum design can be applied.

B. Learning effect test

As the effect of the mixed teaching model in the Rain Classroom has been proved (Lu and Han, 2018), the control group is no longer used for verification. This paper USES the Rain Classroom platform to design a mixed teaching mode guided by spiritual quotient, which can effectively train

information technology ability, vocational adaptability, expression and display ability, communication and coordination ability, innovation and entrepreneurship ability. Through the test of the questionnaire, it can be seen that the reliability coefficient of the questionnaire research data is higher than 0.9, and the reliability coefficient value does not significantly improve after deleting the item, which comprehensively indicates that the quality of data reliability is high and can be used for further analysis. A total of 77 questionnaires were issued, all of which were recovered. The effective sample size was 64, and the effective rate was 83.12%. The validity KMO value of the questionnaire was 0.905>0.8, and the reliability coefficient value was 0.974>0.9, indicating that the validity and reliability quality of the research data were very high. According to the analysis of the survey results (See "Table I"), on the one hand, from the overall evaluation of the course, and the cases are abundant and thoroughly explained. As for the proportion of cases and courses, the proportion of "very good" is 56.58%, and the sample of "good" is 31.58%, which is 88.16% in total. As for the item whether they are good at guiding, enlightening their thinking and encouraging students to participate, the proportion of "very good" is 60.53%, 89.47% in total. The combined "good" and "very good" percentages for other questions averaged more than 85 percent. However, as for the course progress, "good" and 'very good" add up to 78.95%, so teachers should pay more attention to the course progress. On the other hand, the evaluation of the gains obtained from the course learning shows that new knowledge has been acquired and some vague concepts in the past learning have been sorted out. There are relatively more "very good" in the sample, with the proportion of 55.26%, and the combined proportion of good" and "very good" is 82.89%. The results of the investigation on the training effect of spiritual quotient ability are shown in "Table II" below.

TABLE I. FREQUENCY ANALYSIS RESULTS

Туре	Question	Option	Frequency	Percentage (%)	Cumulative percentage (%)
Overall	Whether the content is clear and moderate	Better	36	57.14	57.14
evaluation		Good	23	36.51	93.65
		Common	3	4.762	98.41
		Qualified	1	1.587	100
		bad	0	0	100
		Better	41	65.08	65.08
	Rich case studies, thorough explanations, proper case and course weighting	Good	17	26.98	92.06
		Common	3	4.76	96.83
		Qualified	2	3.17	100
		bad	0	0	100
		Better	42	66.67	66.67
	The language is easy to understand and the explanation is clear	Good	15	23.81	90.48
		Common	4	6.35	96.83
	the explanation is clear	Qualified	2	3.17	100
		bad	0	0	100
		Better	41	65.08	65.08
	Good at guiding, inspiring thinking and	Good	17	26.98	92.06
		Common	2	3.17	95.24
	encouraging students to participate	Qualified	3	4.76	100
		bad	0	0	100



Type	Question	Option	Frequency	Percentage (%)	Cumulative percentage (%)
Overall evaluation		Better	39	61.9	61.9
		Good	14	22.22	84.13
	The pace of the course is better grasped	Common	8	12.7	96.83
		Qualified	2	3.17	100
		bad	0	0	100
		Better	41	65.08	65.08
	P 1	Good	15	23.81	88.89
	Emphasis on atmosphere creation, teaching is contagious	Common	5	7.94	96.83
	teaching is contagious	Qualified	2	3.17	100
		bad	0	0	100
		Better	36	57.14	57.14
	Whether the content is clear and	Good	23	36.51	93.65
	moderate	Common	3	4.762	98.41
	moderate	Qualified	1	1.587	100
		bad	0	0	100
	Rich case studies, thorough explanations, proper case and course weighting	Better	41	65.08	65.08
		Good	17	26.98	92.06
		Common	3	4.76	96.83
		Qualified	2	3.17	100
		bad	0	0	100
		Better	42	66.67	66.67
		Good	15	23.81	90.48
	The language is easy to understand and	Common	4	6.35	96.83
	the explanation is clear	Qualified	2	3.17	100
		bad	0	0	100
		Better	41	65.08	65.08
		Good	17	26.98	92.06
	Good at guiding, inspiring thinking and encouraging students to participate	Common	2	3.17	95.24
	encouraging students to participate	Qualified	3	4.76	100
		bad	0	0	100
		Better	39	61.9	61.9
		Good	14	22.22	84.13
	The pace of the course is better grasped	Common	8	12.7	96.83
		Qualified	2	3.17	100
		bad	0	0	100
		Better	41	65.08	65.08
	Emphasia on atmosphere	Good	15	23.81	88.89
	Emphasis on atmosphere creation, teaching is contagious	Common	5	7.94	96.83
	teaching is contagious	Qualified	2	3.17	100
		bad	0	0	100

TABLE II. FREQUENCY ANALYSIS RESULTS

Question	Option	Frequency	Percentage(%)	Cumulative percentage(%)	
Has your IT skills improved	Better	37	58.73	58.73	
this semester?	Good	22	34.92	93.65	
	Common	3	4.762	98.41	
	Qualified	1	1.587	100	
	bad	0	0	100	
Has your vocational	Better	34	53.97	53.97	
adaptability been improved?	Good	23	36.51	90.48	
	Common	4	6.349	96.83	
	Qualified	2	3.175	100	
	bad	0	0	100	
Has your ability of expression	Better	35	55.56	55.56	
and presentation improved?	Good	20	31.75	87.29	
	Common	7	11.11	98.41	
	Qualified	1	1.587	100	
	bad	0	0	100	



Question	Option	Frequency	Percentage(%)	Cumulative percentage(%)
Has your communication and	Better	38	60.32	60.32
coordination ability been	Good	18	28.57	88.89
improved?	Common	7	11.11	100
	Qualified	0	0	100
	bad	0	0	100
Has your confidence in	Better	37	58.73	58.73
innovation and	Good	14	22.22	80.95
entrepreneurship been increased?	Common	10	15.87	96.83
increased?	Qualified	2	3.175	100
	bad	0	0	100
Total	•	63	100	100

The independent sample T test is shown in "Table III". The results show that both the overall evaluation of the course and the evaluation results of the course are significant,

which indicates that the students surveyed in Management Accounting have a good evaluation of teaching effect and obvious learning gains.

TABLE III. ONE SAMPLE T-TEST

Type	Topic	Obs	Min	Max	Mean	Std. Dev.	P
Overall evaluation	Whether the content is clear and moderate	63	2	5	4.492	0.669	0.000***
	Rich case studies, thorough explanations, proper case and course weighting	63	2	5	4.54	0.737	0.000***
	The language is easy to understand and the explanation is clear	63	2	5	4.54	0.758	0.000***
	Good at guiding, inspiring thinking and encouraging students to participate	63	2	5	4.524	0.78	0.000***
	The pace of the course is better grasped	63	2	5	4.429	0.837	0.000***
	Emphasis on atmosphere creation, teaching is contagious	63	2	5	4.508	0.78	0.000***
Evaluation of learning	Gained new knowledge and smoothed out some vague concepts in past learning	63	2	5	4.413	0.816	0.000***
gains	Gained practical skills and techniques that can be applied later	63	2	5	4.492	0.716	0.000***
	Has your IT skills improved this semester?	63	2	5	4.508	0.669	0.000***
	Has your vocational adaptability been improved?	63	2	5	4.413	0.754	0.000***
	Has your ability of expression and presentation improved?	63	2	5	4.413	0.754	0.000***
	Has your communication and coordination ability been improved?	63	3	5	4.492	0.693	0.000***
	Has your confidence in innovation and entrepreneurship been increased?	63	2	5	4.365	0.867	0.000***

 $^{\rm a.}$ */**/*** means results are significant at the 10% / 5% / 1% level.

V. CONCLUSION

Teachers should always adhere to the principle of "innovation" and "excellence". Only by devoting oneself to it, truly realizing the sense of mission of accounting education research, and deeply understanding the arduous task of accounting education in colleges and universities, can one become a real "teacher" of teaching and educating people, and can accounting education research get rapid development. The teaching reform of *Management Accounting* aims at improving teaching quality and students' learning efficiency, cultivating the spiritual quotient of students born after 2000 to enhance their ability to deal with comprehensive problems. With the continuous application of practice and the continuous progress of information

technology, the further improvement of teaching design and the test of learning effect needs more in-depth practice and research.

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