

Research on the Teaching Performance of Incorporating Ethics and Moral Values in Higher Accounting Education

An Empirical Study on an Accounting Practice Course

Shanshan Yang^{1,2} Tingwei Lu^{1,*} Dongping Li¹ Lin Li¹

¹ *Business School, Chengdu University, Chengdu, Sichuan 610106, China*

² *School of Accounting, Southwestern University of Finance & Economics, Chengdu, Sichuan 611130, China*

**Corresponding author. Email: lutingwei@cdu.edu.cn*

ABSTRACT

Higher accounting education should focus on not only professional knowledge, but also the guidance and shaping of virtues and morality. The course object of this article is the accounting practical course. The students are from a city university in southwestern China. The authors first adopt the empirical research method to investigate the relationship between moral education and college students' learning ability. The results show that the students that have received professional and high-quality moral education perform better in accounting practice courses. The questionnaire survey method is then used to explore what specific ethical and moral contents are recognized and preferred by students. The survey presents that five aspects of moral education with rich connotations in accounting class, i.e. professional ethics, compliance awareness, team spirits, lifelong learning attitude, and self-worth realization, are strongly welcomed by respondents. This paper makes a practical exploration of constructing the teaching reform of ethics and moral values in higher accounting education, which reveals that embedding ethical education in higher accounting professional curriculum helps to cultivate high-quality accounting talents.

Keywords: *Professional curriculum, Higher education, Moral education, Accounting practice.*

1. INTRODUCTION

Fairness and honesty are the two prerequisites for the establishment of a market economy system, playing the role of the cornerstone in improving the efficiency of resource allocation and distributing social wealth. This requires accounting practitioners to have an extremely high quality of ethical awareness in terms of professional skills and professional responsibilities: willing to contribute, be honest, adhere to principles, and strive for excellence. Chapman (2019) discusses how a sense of moral and ethical values is transmitted by the system of education in the Christian virtues with the focus of missionary activity [1]. The educational understanding of salvation supplants the doctrines in western traditional higher education from the late 19th century. In China, both the 18th

and 19th CPC National Congresses¹ have actively advocated the twelve core social values entitled *12 Beliefs*, including prosperity, democracy, civility, harmony, freedom, equality, justice, rule of law, patriotism, dedication, integrity, and goodwill. *12 Beliefs* is a highly condensed expression to embody the fundamental nature and basic characteristics of the core value, reflecting the rich connotation and practical requirements of people's yearning for a better life. Education in ethics is also applied in Chinese higher education. In 2017, the central government issued documents on strengthening the ethics and moral values education of college students. In 2018, China's Ministry of Education required universities to integrate moral education scientifically and reasonably based on the characteristics of different professional talent

1. CPC: National Congress of the Communist Party of China.

training programs. Therefore, keeping honest in a true and fair view required in the accounting profession coincides with the mainstream values and beliefs in China and worldwide. It is an important guarantee for maintaining the harmony and stability of the society, as well as promoting the sound development of the economy and market. Accordingly, embedding ethics and moral values education in higher education are ready to emerge.

This article aims at the accounting practice courses, through which students majoring in accounting are guided into the simulated business environment equipped with financial cloud software. Students can apply the knowledge from accounting practice courses to deal with financial accounting and report preparation better after theoretical accounting courses. For students who are ready to start an accounting career, accounting practices not only fill the gaps in theoretical knowledge effectively but also help them establish a professional attitude of dedication, self-discipline, and patience.

The study finds that: first, students who have received high-quality ethics and moral values education perform better in terms of expertise and teamwork, indicating that moral education can coordinate professional higher education; second, students have a strong demand for incorporating the spirit of professional ethics, compliance awareness, teamwork, and lifelong learning into moral education, providing a referable penetrating path for enriching the materials of ethics and moral values education in college accounting courses.

2. THEORETICAL ANALYSIS AND LITERATURE REVIEW

2.1 Current Research Status on the Ethics and Moral Values Education Embedded in the Professional Curriculum

Higher education around ethics and moral values has long been discussed internationally [2]. Pivec (2011) emphasizes that the core of the mission undertaken by higher education institutions should lie on the code of ethics [3]. Prisacariu and Shah (2016) propose a conceptual approach to take into account ethics and morals education as key virtues in higher education [4]. The education concepts of balancing knowledge-transferring and value-leading are generally accepted, believing that high quality of moral awareness is essential to

people's value orientation and behavior motivation. In the 1960s, American universities have discovered that the most flexible way to deliver moral values and ethics is to embed more moral teaching content in professional courses so that they can reach all students in the most efficient way [5]. D. Kidd, J. Miner, M. Schein and D. Allen (2020) argue that vocationally oriented courses emphasize taking personal responsibility and having commitments to established ethical norms, in addition to social responsibility [6].

Chinese also believe that the key to talent cultivation lies in education, and the critical component of education lies in moral education. This requires the education system to be comprehensively developed by the synthesis evaluation on students' intelligence, physical conditions, community service, and most importantly, virtue. Although professional ethics education is an important part of higher education, it has always been a weak link in Chinese universities [7]. Su Xiaoxiao, Jin Mengru, and Ma Ting (2019) consider that professional education should be included in school education, combining theoretical knowledge and professional practice [8]. From the perspectives above, integrating ethics and moral values education into existing professional curriculums is a more feasible solution.

2.2 The Necessity of Developing Moral Education in Accounting Higher Teaching

The call for more moral education in accounting teaching comes from all walks of life. P. Gibbs and P. Murphy (2009) defend that the virtues of integrity, trust, fairness are pivotal in marketing higher education [9]. Failures on unethical practices are evident in areas like financial and risk management and the conduct of senior managers [2]. Grimstad (1964) proposes that unless a profession maintains a high standard of ethical behavior, it cannot remain effective [3]. He requires that young people who join the accounting profession should be full of ethical professional responsibility. The American Accounting Association (1986), the National Committee on False Financial Reports (1993), and the American Institute of Certified Public Accountants (AICPA) all emphasize the importance of integrating ethical construction and technical knowledge in accounting courses. M. B. Armstrong, J. E. Ketz, and D. Owsen (2003) address that as the accounting faculty are the leaders of the accounting community

to which students are first exposed, and they are responsible for setting the moral tone of the community and providing nurturing environment in which ethical motivation can flourish [10]. American Professor Beets (1993) believes that role-play technique solves practical problems and conflicts in the accounting classroom of "professional moral and legal responsibility" [11].

Chinese educators have advocated putting the cultural and moral study into accounting education for a long time [12]. However, instead of spontaneous formation, morals and ethics should be instilled deliberately. Therefore, the accounting professional moral consciousness should be aroused through accounting education [13]. PAN Xulun, the father of China's contemporary accounting research, started moral education in China with "Men without credibility will not stand." in the 1920s, and has devoted his life to cultivating accountants who are "credible adults" [12]. In recent years, the literature on accounting moral education in China can be roughly divided into two parts: one is the exploration of the teaching contents, and the other is the research of teaching methods and teaching objectives. The financial accounting course of Shanghai Lixin Accounting Institute explores the connotation of credit education in accounting by combining theoretical knowledge of accounting information quality and real cases of financial fraud. Representative cases should be selected to cultivate students' perceptual understanding of professional ethics education [8]. Xu Ping (2005) expounds that accounting higher education is a key point in establishing accounting professional ethics and cultivating moral consciousness. Moreover, professional ethics is the guarantee to become credible accountants, which can be perceived as the foundation of the accounting industry [7].

2.3 The Influence on Integrating Moral Education into Accounting Practice Curriculum

The development of financial accounting software technology has experienced three stages of development: trial, research & development, and commercialization. In recent years, with the continuous changes in internal and external of enterprises, the management needs and information needs for firms are changing. The rapid growth in the technologies of big data, AI, computer networks, cloud drives the improvement of financial software. Modern financial software has

generally realized centralized management by integrating multiple positions such as cashier, accounting, and taxation, to ensure a high degree of connection between financial flow, logistics, and information flow. By virtue of advanced financial technology, students can not only grasp the basic operating procedures and specific methods but also experience how the technology has successfully helped enterprises to reduce costs and increase efficiency. It can be seen that the accounting practical teaching can subtly inspire students to consciously strengthen theoretical study, deepen comprehensive job training, and scientifically abide by financial laws and regulations. On a deeper level, accounting practical teaching helps students develop a rigorous and efficient working attitude, and enhance the courage to catch up with the ever-changing technology. Finally, the tracking technology of financial software also provides a scientific recording channel for evaluating the learning efficiency of students, to help educators explore better methods in talent training.

3. RESEARCH DESIGN

3.1 Research Object

We set two classes of 172 college junior students majoring in accounting and auditing from a city university in Southwestern China as the experimental group and the controlled group, respectively. One class acted as an experimental group with a sample size of 75 students, whose teaching concepts were to integrate ethics and moral values education with traditional accounting practical class in a targeted manner; the other class was a controlled group with a sample size of 97 students, which only received the traditional practical teaching content. The two groups had nearly the same male-to-female ratio. They received the same basic theoretical courses in their lower grades, and their study performances were at a comparable level.

3.2 Experimental Contents

The teaching contents for the experimental class are conducted as follows: When it comes to cashiers and expense accounting, the lecturer combines "Company Law" and other laws & regulations with professional ethics, to enhance students' awareness of legal compliance; that is, sticking to the rules and putting lofty ambitions down-to-earth into meticulous work. When speaking of tax accounting, the lecturer combines

the historical changes in taxation collection and management system with the rapid accumulation of common people's wealth, students can correctly view the dialectical relationship between wealth and taxation in this way; thus, the awareness of paying tax can be strengthened in the long run. As for the practical course of commodity circulation and exchange payments, China's new economy and profit-realization development with the Internet technology growing is cited to demonstrate that the improvement of commodities circulation from production to consumption is inseparable from the support of new technologies. When referring to general ledger accounting, the establishment of the accounting standards and the credible requirements on the capital market are presented, to raise students' determination of "make no false accounts". As regards the course of financial management, the case of General Electric to build their financial sharing center is referred to make students understand that the increasing optimization of financial management will enhance the enterprises' core competitiveness all over the world, reinforcing the concept of lifelong learning. However, students in the controlled group are nearly free from these rich pieces of knowledge in ethics and beliefs.

3.3 Experimental Tools

3.3.1 Practical Testing of Accounting Software

The practical course lasts a total of 40 hours within a week. Both the experimental group and the controlled group have access to an immersive accounting comprehensive laboratory. A computer and a cloud account are distributed to each student, to eliminate behavioral differences caused by time factors, and ensure practice effect while learning simultaneously. The course employs the group business practice training section named the "Large Enterprise Case Internship", which is developed by the XD accounting education training platform under a global leading financial services provider named UFIDA.² Relying on the XD's financial sharing cloud software, this section aims to deepen students' practice ability in seven key financial and accounting positions, including cashier accounting, tax accounting, expense accounting, commodity circulation accounting, current transaction accounting, general ledger accounting, and how to

be a qualified finance manager in accounting. The theoretical understanding and professional judgments are integrated into the above-mentioned job-related case scenarios, therefore the subjects' abilities to analyze and dealing with complex occupational dilemmas can be effectively evaluated. Finally, the cloud software automatically records subjects' transcripts. The task completion progress, business operation level, task understanding ability, accuracy rate, and team cooperation are measured individually in the following indicators: the score of completion, the score of operation, the score of understanding, the score of accuracy, the score of team cooperation, and total score of the former five ones. The advantage of software evaluation lies in its fair and timely feedback on the teaching situation, eliminating the judgment bias caused by subjective rating.

It is expected that the scores of students who have received professional and high-quality moral education will be significantly higher than those who have not received special moral education.

3.3.2 Questionnaire Survey

We develop the questionnaire survey for students in the experimental group. The questionnaire is divided into two parts: the objective questions and the open questions.

The objective questions investigate students' interests and attitudes towards integrating moral contents into professional curriculums, consisting of a series of multiple-choice questions. Each topic extends five options, namely: A strongly agrees, B agrees, C neutral, D disagrees and E strongly disagrees. Students choose according to the actual situation they come across. In the fourth part of this paper, the percentages of A and B will be an aggregate, and the percentages of C, D, and E will also be gathered together to calculate.

For the open questions, students are required to write down their current gains and future expectations for the professional courses based on their own academic schedules. They are encouraged to express themselves to the greatest extent. Students are informed in advance that the questionnaire will be part of their usual performances, so as to prevent non-cooperation from affecting the test results.

2. XD (Xindao Technology Co., Ltd.) is the core member of the UFIDA group.

4. ANALYSIS AND RESULTS

4.1 Experimental Test Analysis

When the whole experiment is completed, the scores of practice transcripts generated

automatically from the financial software are imported into the statistical data software Stata 15.0. The mean, median, and standard deviation of each score are calculated to compare the experimental group and the controlled group. Besides, the mean difference T-test is performed.

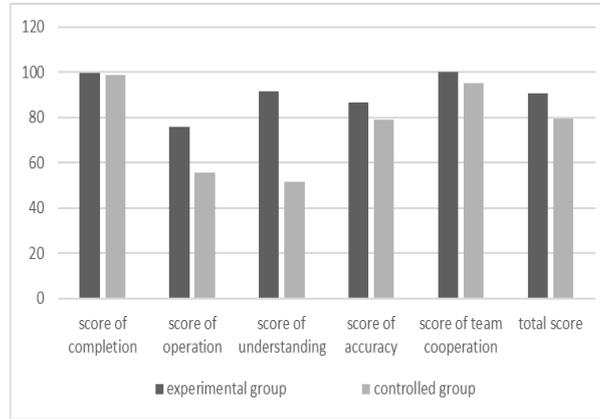


Figure 1 Comparison of the results of the experimental group and the controlled group.

It can be seen from "Figure 1" the mean value of each score in the experimental group is generally higher than that of the controlled group. Among the score of completion, operation, understanding, accuracy, team cooperation, and the total score, the difference in task understanding ability is the most significant. It illustrates that students who have received moral education in professional courses have a better understanding of the manipulation of various positions, and are more likely to abide by the rules of their positions to a certain extent. As shown in "Table 1", for the mean values column, the score of completion in the experimental group and the controlled group are 99.92 and 98.94 respectively, and the standard deviations are 0.69 and 4.95. The difference between the two mean values is slim, whereas the latter has a higher degree of dispersion; As for the score of operation, the mean values of the two groups are 76.08 and

55.90 respectively, and the standard deviations are 1.98 and 4.17; Concerning the score of understanding, the mean values are 91.56 and 51.45 respectively, while the standard deviations are 9.4 and 10.12; When it comes to the score of accuracy, the mean values are 86.72 and 79.08 respectively, and the standard deviations are 6.53 and 8.36; When mentioning the score of team cooperation, the mean values are 100.00 and 95.15 respectively, whereas the standard deviations are 0 and 7.52; On the whole, the total scores are 90.69 and 79.29 respectively, while the standard deviations are 3.92 and 5.45. Overall, compared with the controlled group, students in the experimental group have higher mean values and lower-degree dispersions. The difference of mean values between groups is significant at the level of 10% or 1%, indicating higher achievements.

Table 1. Descriptive statistics and mean detection

		N	Average Value	t-value	SD	Median
score of completion	Experimental group	75	99.92	1.703***	0.69	100.00
	Controlled group	97	98.94		4.95	100.00
score of operation	Experimental group	75	76.08	38.673***	1.98	76.00
	Controlled group	97	55.90		4.17	57.00
score of understanding	Experimental group	75	91.56	26.588***	9.4	93.00
	Controlled group	97	51.45		10.12	54.00
		N	Average Value	t-value	SD	Median

score of accuracy	Experimental group	75	86.72	6.520***	6.53	87.00
	Controlled group	97	79.08		8.36	80.00
score of team cooperation	Experimental group	75	100.00	5.508***	0.00	100.00
	Controlled group	97	95.15		7.52	100.00
total score	Experimental group	75	90.69	15.312***	3.92	91.25
	Controlled group	97	79.29		5.45	80.51

a Note: T-test for difference in mean (two-tailed). The superscripts ***, **, and * indicate two-tailed statistical significance at the 1%, 5%, and 10% levels, respectively.

4.2 Questionnaire Feedback Analysis

4.2.1 Feedback Analysis of Objective Questions

The statistical results of the 75 valid questionnaires show that it is welcomed by the majority of the respondents to enrich the connotation of accounting practice and play a leading role in values shaping. "Figure 2" demonstrates that 84.61% of the respondents agree that professional classes should be integrated into

the world economy. 91.35% of the respondents are interested in the integration of finance and trade issues of new time, whereas 91.34% of them choose law rules and ethics. 65.39% of the respondents vote for the life belief topics and they consider that professional classes should cover the content of how to establish ideals and beliefs in life. It can be seen that the vast majority of students agree that accounting should not only be a tool for earning a living, but a life-long career in which they devote themselves to the motherland, to be collective, and to create more value.

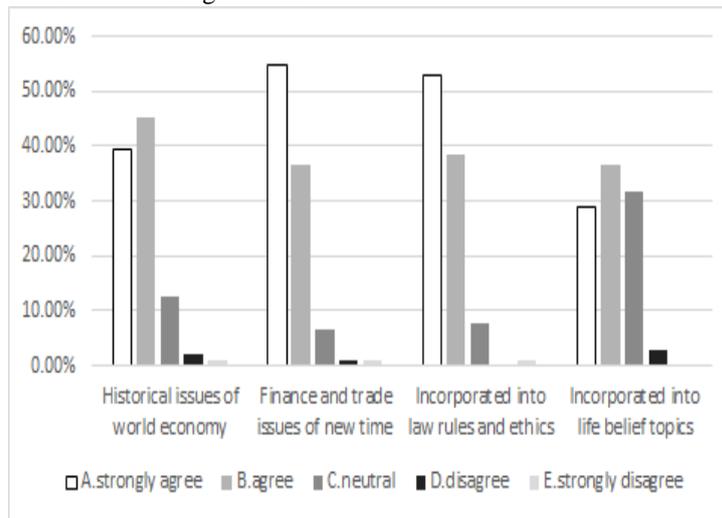


Figure 2 Respondents' different attitudes towards ethical topics.

4.2.2 Feedback Analysis of Open Questions

"Table 2" shows the respondents' feedback of various ethical thoughts on the improvement of learning and working ability. The results generally reveal that most of the respondents have a positive response to high-quality ethics and moral values

education. Furthermore, they expect educational assistance in higher accounting curriculums about five aspects, that is, professional ethics, compliance awareness, team spirits, lifelong learning attitude, and self-worth realization.

Table 2. Summary of the survey respondents' feedback of ethical thoughts on learning and working abilities

Professional ethics	Compliance awareness	Teamwork	life-long learning	Realizing Self-worth
1.Be independent, Honest and fair. 2.Decency, perseverance, willing to give, keep improving. 3.Need good professional ethics and professional attitude.	1.Be more familiar with national financial laws, policies and systems, and act in accordance with economic laws and regulations. 2.Grasp the yardstick of doing things well and guard yourself. 3.Grasp the yardstick of doing things well and guard yourself.	1.Understand the importance of teamwork. 2.Enhance awareness of the overall situation and collective dedication.	1.Keep learning to keep up with the times. 2.Determined to get more professional certificates.	1.Consolidate Knowledge and practice. 2.Identity with one's own culture and institutions. 3.Seek deep-rooted professional and lifelong belief. rationally.

5. CONCLUSION

The improvement of professional ethics and law compliance for accounting practitioners is of great significance to the long-term and healthy development of market economy system. Disseminating the relevant virtues of integrity and dedication in professional education is of great benefit to accounting talents to inherit excellent qualities.

Therefore, it is necessary to persist in the long-term exploration of moral education in the accounting courses, establishing a new model of education curriculum system that combines knowledge education in the original courses, and moral education.

AUTHORS' CONTRIBUTIONS

Shanshan Yang is responsible for experimental design, Tingwei Lu analysed data and wrote the manuscript, Dongping Li wrote and revised the manuscript, and Lin Li contributed to revising and editing.

REFERENCES

[1] Chapman, Mark, "Exporting Godliness: The Church, Education and 'Higher Civilization' in the British Empire from the late Nineteenth Century", *Studies in Church History*. 55. 381-409. 10.1017/stc.2018.6.

[2] Mead, A.R, "The moral responsibility of the university", *Peabody Journal of Education*, 1949, 26(6), pp. 354–58.10.1080/01619564909536203.

[3] Pivec, Franci., "Codes of Ethics and Codes of Conduct for Using ICT in Education", *Organizacija*. 2011, 44. 62-66. 10.2478/v10051-011-0007-8.

[4] Prisacariu, A. and Shah, M. "Defining the quality of higher education around ethics and moral values". *Quality in Higher Education*, v. 22, n. 2, p. 152-166, Aug 2016. ISSN 1353-8322. Disponível em: < <Go to ISI>://WOS:000384420300006 >.

[5] Grimdstad, C.R, "Teaching the ethics of accountancy". *Journal of Accountancy*. 1964(July), pp. 82-85.

[6] D. Kidd, J. Miner, M. Schein, M. Blauw, D. Allen. "Ethics across the curriculum: Detecting and describing emergent trends in ethics education", *Studies in Educational Evaluation* 67 (2020) 100914.

[7] Xu Ping, "A discussion on accounting professional ethics education in universities: based on the analysis of fundamental education function", *Communication of Finance and Accounting*, pp.103-106, 2005(01). In Chinese. <https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFD2005&filename=CKTS200501028&v=cqD1A8AJ6IArxxjPpUQvq5tx6f38sUkPrWwFFZzMPJUdNL6Wz085WHsYPJh%25mmd2Fpb0p>.

[8] Su Xiaoxiao, Jin Mengru, Ma Ting, "Problems and solutions of accounting professional ethics construction", *Auditing and Finance*, pp. 54-56, 2019(07). In Chinese.

- <https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2019&filename=JXSS201907025&v=WkwhLLcGDcg9r4asyfnvs0VKMJuTEBC5rbvjtbiW6PZzjOVPvG71527%25mmd2FjvqIf%25mmd2FvC>.
- [9] P. Gibbs, P. Murphy, "Implementation of ethical higher education marketing", *Tertiary Education and Management*, pp. 341–354, Vol. 15, No. 4, December 2009.
- [10] M. B. Armstrong, J. E. Ketz, D Owsen, "Ethics education in accounting: moving toward ethical motivation and ethical behavior", *J. of Acc. Ed.*, pp. 1-16, 21 (2003).
- [11] Beets, S.D., "Using the role-playing technique in accounting ethics education", *Accounting Educator's Journal*, pp.46-55, 1993. 5(Fall).
- [12] Wu Cheng, "To educate people with faith and integrity", *Moral Education China*, pp. 62-63, 2014(18). In Chinese. <https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFD2014&filename=DEYU201418030&v=%25mmd2BlwZGIOWqVQVtkLFz6tOKn0jDZ8FOyQBqa%25mmd2FHCxEtpDA2AwSJZad5g3mBpIpP5CBy>.
- [13] Wang Qiufei, Sun Yanli, Li Dan, "On the Professional Ethics Education of Accounting Major in Colleges and Universities", *Communication of Finance and Accounting*, pp. 60-63, 2008(11). <https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD&dbname=CJFD2008&filename=CKTS200811017&v=aemqBwfwGHZKtLZNfuXNIE5oyaUIOEdK1%25mmd2FUeVTgOd7T%25mmd2B%25mmd2Fwz15hedDw1A%25mmd2FIKGWUGw>.