

Research on Case Development and Evaluation of Business Administration Based on Vocational Education Theory

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Abstract: In view of the problems such as non-standard case construction, poor writing quality and lack of evaluation criteria, which affect the teaching effect of case teaching, this paper analyzes the causes of unsatisfactory teaching effect of case teaching based on constructivism learning theory and learning transfer theory, and develops the reasonableness scale of case writing and the effectiveness scale of case teaching, including objectives, content, teaching mode and evaluation. It has been proved that case construction and evaluation norms will produce good case teaching effect. It is helpful to promote the direction of knowledge, experience and exploration, and to promote practical teaching.

1. Introduction

Case teaching method is a teaching method widely used in international and domestic vocational education. Due to the lack of systematic, in-depth and reflective development and research in case construction, the current case teaching effect is not satisfactory [1]. Therefore, it is necessary to build a knowledge, experience and research-oriented case writing and evaluation system.

Case teaching is a kind of teaching method that allows students to study by simulating realistic scenes and discussing or discussing the treatment methods in the case scenes. It is mainly used in the teaching of management, law and clinical medicine. Cases are written from the perspective of decision makers, enabling students to observe and consider problems in their own shoes as decision makers or problem solvers [2]. Zheng Jinzhou believes that a case is a description of an actual situation, in which there are one or more difficult problems, and there may also be ways to solve these problems [3]. Guess believes that cases should be real, and a good case should present the situation in which individuals face real problems and seek solutions, and tell the real conflicts or contradictions faced by the subject of the case [4]. Ouyang Hui is the teacher who should give more classroom feedback to the editor, and through such effective feedback, help the editor to dynamically improve the case [5]. Wang Shujuan et al. made an in-depth analysis of three Baiyu cases, summarized the characteristics of high-quality cases, and developed a normative index system of management cases in the form of case expert scoring [6]. According to statistics, each Harvard Business School student analyzes at least 500-700 case studies during his/her study to delve into real-world management issues [7]. The existing literature mainly discusses the qualitative discussion of management case collection and compilation, and few quantitative studies.

Based on the existing research data and results, this study developed the reasonableness scale of case writing and the effectiveness scale of case teaching by combining qualitative and quantitative research and following the standard development procedures, and verified them by reliability and validity testing, exploratory factor analysis and confirmatory factor analysis. It provides reference for case collection and case teaching in the field of business administration.

2. Theoretical basis

2.1 Constructivist learning theory

Constructivism learning theory is a theory that emphasizes that learners actively construct internal mental representations in the process of interacting with the environment .

Constructivism learning theory is a further development from behaviorism to cognitivism. It reveals the constructivism principle of cognition from the epistemological level and emphasizes the initiative of cognition. Knowledge is acquired by means of meaning construction with the help of other auxiliary means and necessary learning materials and resources in a certain context, i.e. social and cultural background. Constructivist learning theory emphasizes learner-centered, and believes that context, collaboration, conversation and resources are the basic elements or basic attributes of the constructivist learning environment.

Constructivists pay more attention to how learners construct knowledge based on their original experience, psychological structure and beliefs, and emphasize the subjectivity, sociality and situational nature of learning. Basic point of view: The dynamic nature of knowledge, knowledge is not an accurate representation of reality, nor is it the final answer, but only an explanation, a hypothesis, need to be recreated for specific situations. Students' experience world, students do not enter the classroom with empty heads, they have a rich and different experience world, teaching should pay attention to students' previous experience. Active construction, social interaction and situational learning, learning is the process of learners' active construction, and at the same time, it needs to cooperate with others and carry out in a specific context.

Students are the center of the teaching process, and teachers are the organizers, helpers and facilitators. Through the use of context, collaboration, conversation and other elements of the learning environment, students can exert their initiative, initiative and initiative, and help students to construct the meaning of what they have learned. In this process, knowledge is not simply and passively accepted, transmitted and instilled, but acquired by students based on certain situations, social and cultural background and experience, with the help of others, using necessary learning conditions and meaning construction.

Business administration case is a form of situational expression in constructivist learning theory. The selection of appropriate cases should not only be as close as possible to the knowledge theme and teaching objectives, but also select cases with benign conflicts to increase the depth of their discussions. Case questions are one of the key steps to guide students to construct knowledge, and 3-5 cases covering comprehensive questions and key knowledge questions of the main knowledge framework should be selected to facilitate students' independent learning and collaborative learning.

2.2 Transfer theory of learning

This theory holds that the ideas formed in problem solving can be transferred to similar problems to solve similar problems. If the learning situation is similar to the actual situation in which the learned content will be applied in the future, it will be more beneficial to the transfer of learning. It is found that there are three ways of learning transfer: one is the transfer from the old knowledge acquired in the past to the new knowledge acquired in the present; The second is the transfer from the knowledge acquired at present to the knowledge learned later; The third is the transfer of knowledge and skills to daily life and work.

On the one hand, case writers need to create a practical situation through the case, and integrate a lot of knowledge into the situation, so as to closely combine theoretical knowledge with practical practice; On the other hand, according to the teaching purpose, classic and typical management problems are set in the cases to provide students with the opportunity to simulate and analyze the real world problems and lay the foundation for students' future work. In addition, editors should also set open case questions to allow intense discussions between teachers and students and between students. In the process of debate and negotiation, the values and personality of case users should be fully respected, so as to create a good atmosphere of equality between teachers and students. This can not only optimize students' own knowledge structure, strengthen their internalization and application of knowledge, but also help them realize the effective transfer of management knowledge.

2.3 Case writing rationality

The theoretical basis of case construction is narrative construction theory, management practice theory and postmodern knowledge view. The case is expressed through narrative.

Narrative constructivism mainly studies the role of narrative in subject construction. Narrative constructionism focuses on the relationship between narrative and subject construction, that is, how narrative plays a constructive role in the cognition, identity and behavior of individuals or groups. It explores the universality of narrative structures in human cultural activities and how these narrative structures derive from the narrative nature of the human subject itself.

The role of narrative in subject construction. Narrative can help individuals construct and understand themselves. By narrating their own experiences, emotions and thoughts, individuals can form their own cognition and evaluation. Narrative structure refers to the organization and arrangement of various elements in a narrative. Different narrative structures can convey different information and emotions, affecting the understanding and feelings of the listener or reader.

Management practice theory holds that management is a practice rather than a science. Managers should improve management ability through practice to achieve organizational goals. Management is not a simple theoretical knowledge, but a process that needs to be explored, verified and improved in practice.

Managers should have rich practical experience. Through participating in team projects, serving as student leaders, internships and other experiences, managers can accumulate rich practical experience and improve their management ability. Pay attention to problems in practice: managers should find problems in practice, analyze problems, solve problems, and constantly improve management methods. Pay attention to team building, team is the foundation for an organization to achieve its goals, managers should pay attention to the growth of team members, give play to the overall advantages of the team, and create a good team atmosphere.

Case writing is the key process of presenting knowledge points in teaching objectives through case plot narration.

In the past teaching, the unreasonable case selection and the lack of typicality are often the important reasons that cause the case teaching to be mere form and the teaching effect to be low. The case is not typical often manifested in the following aspects: poor correlation of knowledge, not close enough connection. Cases come from practice and are higher than practice. The description of case events should cover the theoretical knowledge points involved in the teaching objectives, which is convenient for case analysis and comprehensive summary statement.

2.4 Case teaching effectiveness

The biggest feature of case teaching is that it can reduce the trial and error cost of users in future work and practice by simulating the market situation, and form the grafting of knowledge to practice and practice to ability. By combing domestic and foreign literature, it is found that there are studies focusing on the effects of case teaching on knowledge, experience and ability.

At the knowledge level, editors take cases as the carrier, and create management situations that are infinitely close to society and enterprises, so as to truly restore the real scenes and focus issues, shorten the distance between classroom and society, theory and practice, and make it easier for users to understand the social knowledge that is difficult to be expressed structurally in economic and management disciplines. The process of students' knowledge construction is divided into three stages: In the first stage, students can learn independently through the case situations, knowledge themes and case problems created by teachers; In the second stage, teachers will conduct multi-level and progressive questioning of students through classroom guidance, group discussion, case presentation and main knowledge points. Students can complete collaborative learning between teachers and students and between students. In the third stage, students can identify the knowledge to be built, deepen their understanding of knowledge, and further improve their own knowledge system through the teacher's final class summary and comments.

At the experience level, case teaching can establish a connection between theory and practice, which not only helps teachers and students deeply understand the complex situations in real life, but

also helps them apply their professional theoretical knowledge to practical problems, effectively enhance their cognition and perception, and enrich their practical experience. More importantly, case teaching can effectively cultivate students' ability. Good case teaching not only enables students to understand or master one or two knowledge points of management disciplines, but also enables them to combine theory with practice, and equip them with the ability to find, analyze and solve problems by using theories and methods.

3. Topic selection and pre-research

3.1 Teaching case construction method steps

Identify the theme and central thesis: Select a typical and universal problem or situation that presents a challenge to classroom management, student interaction, teaching methods, etc. Cases should focus on a central topic and highlight a specific teaching idea or strategy through specific teaching events.

Background description: The teaching environment, class type, student characteristics and course content of the incident are introduced in detail. Identify the key players in the event and their roles and responsibilities to help the reader understand the cause and effect of the event.

Event description: describe the occurrence process of the event in the form of a story, including the cause, development and outcome of the event, and highlight the conflict or problem situation in the event. The details should be specific and detailed, describing key details such as the student's language expression, changes in the classroom atmosphere, and the teacher's immediate response.

Problem analysis and reflection: Combining with the teaching theory, this paper deeply analyzes the problems in the event and their root causes, and points out the nature of the problems and their causes. Reflect on their own teaching behavior and decision-making, consider whether there are shortcomings in teaching strategies or communication methods, and show the inner world and professional growth of teachers when they face challenges.

Put forward solutions: According to the analysis results of the problem, put forward specific solutions or improvement strategies, these strategies should be practical and operational, and can solve the practical problems.

3.2 Determination of case collection index

First of all, based on the domestic and foreign classic literature on case collection and case teaching and the evaluation guide of excellent management cases, the relevant research questions are designed. Then, the author talked with professors who have rich experience in managing case compilation, case teaching and case review, and derived the initial measurement dimension and item library of the scale after fully absorbing their suggestions. Among them, the rationality of case writing contains 6 dimensions and 30 items; The effectiveness of case teaching includes 3 dimensions and 16 items, and ensure that there are more than 4 items measured in each dimension. On this basis, the author conducted interviews with a number of teachers who have been engaged in management case editing and case teaching for a long time, as well as MBA and EMBA students who have participated in case teaching. Subsequently, the author invited three teachers with rich experience in management case compilation, case teaching and scale development to evaluate the questionnaire content, format, item selection, appropriateness and accuracy. Finally, it is determined that the initial scale of reasonableness of case writing consists of six dimensions: clarity of teaching objectives, typical case selection, logic of case plots, interest of case plots, matching of case questions and openness of case questions. The initial scale of case teaching effectiveness consists of three dimensions: theoretical knowledge dimension, practical experience dimension and comprehensive ability dimension.

3.3 Initial scale pretest

Before the formal large-scale survey, a preliminary survey was conducted among a large number of business school teachers, MBA and EMBA students to test the reliability of the initial scale and

collect their opinions on the semantics of the measured items. The questionnaire was measured using a 5-point scoring method (1 means completely disagree, 5 means completely agree, the same below). The survey collected more than 500 questionnaires, covering Anhui, Beijing, Shanghai, Sichuan and other regions, and received strong support from teachers and students of universities such as the University of Science and Technology of China. Finally, after eliminating the questionnaires that had not participated in case compilation, case teaching, no case classroom experience, and obvious problems in answering time and answers, the number of effective questionnaires and the recovery rate were obtained, and the number of pre-survey samples met the test standard of 3-5 times the maximum item "subscale". Then, the reliability of the scale was tested by single-population correlation coefficient and Klonbach coefficient. According to the selection principle of items in the scale, items that are significantly correlated with the total score, whose correlation coefficient is greater than or equal to 0.5, and whose reliability coefficient is less than or equal to the overall reliability coefficient of the scale after deletion are retained. After screening, this study found that the item "the teaching goal of a teaching case can focus on a certain theory and knowledge point." At the same time, according to the feedback of the subjects, it is found that there are some problems of ambiguity or semantic repetition. Therefore, the author decided to improve the problematic items, and invited experts in related fields to evaluate the revised items again, so as to improve the clarity and accuracy of the item expression and enhance the content validity of the scale. Finally, after several rounds of modification, the case writing rationality scale composed of 6 dimensions and 29 items and the case teaching effectiveness scale composed of 3 dimensions and 15 items were formed.

4. Case table development and validation

4.1 Objectives of the Business Administration case course

Knowledge acquisition helps students understand and master the basic concepts, principles of business administration and its application in enterprise operations. Through case studies, students are able to gain an in-depth understanding of all aspects of business operation, such as corporate strategy, organizational structure, human resource management, marketing, etc.

Skills improvement to develop students' practical problem solving ability. Through case studies and discussions, students are able to apply management theory to analyze practical problems and make suggestions for improving business management. At the same time, the course also focuses on improving students' communication and coordination skills, teamwork skills, and written expression skills in writing enterprise analysis reports.

Emotional attitude and values, cultivate students' love for business administration, establish correct career concepts, and enhance the sense of social responsibility and mission. Through the course learning, students should have a sense of innovation, dare to face challenges, and have the courage to solve problems. In addition, it also emphasizes the cultivation of students' integrity, dedication and cooperation, laying a solid foundation for their future career.

4.2 Subject self-construction and self-transformation

The curriculum form is knowledge-centered, with the specific goal of constructing and spreading knowledge, improving intelligence and achieving identity, and ultimately promoting self-transformation.

The ultimate goal is to achieve self-transformation of managers. As Bruner said, "The self, in fact, is not something that intuition can recognize as essential." It's already there, just waiting for us to put it into words. We continually construct and reconstruct ourselves to meet the needs of the situations we face, guided by our memories of the past and our hopes and fears for the future. It's like creating a story about who we are, what we are, what happens, and why we do what we do." The self is told, and who we are depends on our stories. The self is reflected in the narrative of life. The self is reflexively constructed in the narrative process. The whole meaning of the self is contained in the story, and only in the story can the self be understood. Therefore, self-transformation is the process of constructing a new story.

One of the specific objectives of the case course is the construction and dissemination of knowledge. Knowledge is a form of knowledge that is constructed by cognition or cognitive mode and expressed in language. It is different from scientific knowledge which is constructed in formal thinking mode and expressed in logical language. The self is constructed by interacting with others in a cultural context. Traditions and others in a culture are nourishment for the self. The transformation of self is inseparable from the cultural tradition, the listening of others and the construction of self.

The construction and dissemination of knowledge enhances students' intelligence. "Intelligence" is the ability to construct (create, tell) life stories, and to follow (understand, read) life stories. Intelligence is the ability to construct, whether fictional, such as novels, movies, plays, or real, such as history, news, anecdotes. On the passive side, intelligence is the ability to follow a story. Like Dewey's "learning by doing," we believe that the process of listening to and understanding others and constructing oneself can enhance students' intelligence.

4.3 Business Administration case course content

According to modern cognition, knowledge is only scientific knowledge, and cases are not knowledge. The case is regarded as a tool to lead to scientific knowledge. The course content is not the case presented to students directly, but the scientific knowledge behind the case. As a case teacher once told me, the reason we talk about birds flying is the aerodynamics behind them.

Course content is knowledge. Cases are a kind of knowledge. The knowledge here is no longer the knowledge of traditional ideas, it includes not only scientific knowledge but also humanistic knowledge, practical knowledge, empirical knowledge, local knowledge and so on. Cases are derived from practice, which is a historical recreation of events that occurred in an enterprise over a period of time, and should be authentic. In management education, literary narration has educational value. Management scholar Bennis called for the inclusion of fictional literary works in management education, arguing that imaginative literature to illustrate and explain people's behavior in business organizations is richer and more realistic than journal articles and textbooks. A case is a story with complete elements, describing the intention and meaning of the character's actions, the changes and progress of the actions.

Several key principles should be followed in the selection of business administration cases: originality: Cases must be self-selected, original, and reflect the author's independent thinking and discovery.

authenticity: Authenticity is the basic principle of business administration case writing. The case should be a true record of business activities, including the decisions made by managers in the face of difficulties, the facts relied on, etc. While some sensitive issues or characters can be withheld, the main storyline, facts and figures must be true.

concreteness: The narrative of the case should be specific and specific, not general or abstract description. It should contain the complete plot from the beginning to the end, including the exact time, place, involving the inner activities of the characters and so on. In addition, some disturbing information related to the event but not directly related to the subject matter of the case should be included to reflect the complexity of the case.

timeliness: Cases should describe recent events because too long a time gap reduces their significance as a guide. The environment is constantly changing, so discussing outdated events may not be of much value to today's business. Therefore, the case selection of business administration professional papers should ensure a certain timeliness. Together, these principles ensure that the selected cases are both of research value and provide useful references for practical and theoretical research in the field of business administration.

4.4 The teaching mode of business administration case course

Case teaching can be defined as a teaching method that leads students to discuss specific situations through the description of a specific situation. In a certain sense, it is contrary to the teaching method. "Case teaching mode mainly emphasizes the application of case teaching and combines a variety of teaching methods to achieve the best teaching effect . Case teaching has been

widely praised in business school teaching for its advantages of situational authenticity, high participation and promoting critical thinking. Through the all-case teaching method, students can deeply understand the actual operation of enterprises, combine theoretical knowledge with practice, and improve the ability to analyze and solve problems. Teachers usually choose representative and targeted cases to guide students to analyze and discuss, so as to deepen students' understanding and mastery of business administration knowledge.

The teaching mode of business administration case course also pays attention to the combination of various teaching methods. In addition to the traditional classroom teaching, we will also use a variety of teaching methods such as group discussion, role playing, and simulation. These teaching methods can stimulate students' interest in learning and increase their participation and enthusiasm. For example, through group discussion, students can communicate and share their views with each other and broaden their ideas; Through role play and simulation, students can place themselves in an actual corporate environment and experience the process and results of management decisions.

The teaching mode of business administration case course also emphasizes the combination of theory and practice. In the teaching process, teachers will encourage students to apply the theoretical knowledge they have learned to practical cases, and test and consolidate the knowledge they have learned through practice. At the same time, teachers will also guide students to pay attention to current business hot spots and practical problems, and cultivate students' practical ability and innovative thinking.

4.5 Evaluation of business administration case courses

The evaluation of the Business Administration case course is a multi-dimensional and comprehensive process designed to ensure the effectiveness of the course and enhance students' practical ability. Several key aspects:

Clarity of objectives: Business administration case courses should clearly define their teaching objectives, including cultivating students' practical operation ability, problem-solving ability, and improving students' critical thinking, communication and teamwork skills. These objectives should align with the core requirements of the Business Administration program to ensure that students are equipped with the appropriate professional quality and practical ability upon completion of the program.

Case selection and quality: Case selection is the key to the business Administration case course. Cases should be representative, current and contextual, reflecting real issues and challenges in the field of business administration. At the same time, the quality of the case is also crucial to ensure that the content of the case is accurate and complete, and can trigger in-depth thinking and discussion among students.

Teaching methods and means: Business administration case courses should adopt diversified teaching methods and means, such as interactive teaching, discussion, role playing, etc., in order to improve students' participation and learning effect. Through these methods, students can have a deeper understanding of the case content and develop the ability to analyze and solve problems.

Cultivation of students' ability and quality: When evaluating business administration case courses, attention should be paid to whether students have improved their comprehensive abilities, including critical thinking, communication, teamwork, etc. The improvement of these abilities is an important goal of business administration education and an important index to evaluate the quality of courses.

Teaching quality evaluation system: Business administration case courses should establish a perfect teaching quality evaluation system, including supervision mechanism, teaching evaluation mechanism, learning evaluation mechanism and so on. These mechanisms can ensure that the quality of teaching and learning in the curriculum is continuously monitored and improved, providing better protection for students' learning.

Student feedback and satisfaction: Student feedback and satisfaction are an integral part of the evaluation business Administration case course. Through the collection and analysis of students' feedback on the course, we can understand students' views on the course content, teaching methods and teaching effects, and provide important references for the improvement and optimization of the

course.

5. Case writing rationality and teaching effectiveness

5.1 Case teaching evaluation table development

Example of case teaching evaluation form

1) Basic information, including: course name, teacher, class, teaching time.
2) Evaluation of teaching objectives. Clarity of objectives, teaching objectives are clear, specific, in line with the syllabus and course requirements.

Goal achievement degree, whether students have achieved the expected teaching objectives through case learning.

3) teaching content evaluation. content relevance: whether the case content is closely related to the course topic and covers the main knowledge and skills required by the course outline. Timeliness: Whether the case reflects the cutting-edge trends of the discipline and integrates the latest research results and viewpoints. content difficulty: whether the content difficulty of the case is moderate and whether enough learning resources and development materials are provided for students at different levels.

4) Evaluation of teaching methods. Diversity of methods: whether a variety of teaching methods and tools are used, such as case studies, group discussions, role playing, etc. method effectiveness: Whether the teaching method can effectively guide students to actively participate in class activities and improve learning results. technology application: whether to make full use of multimedia, network and other information technology means to enrich teaching resources, improve teaching efficiency.

5) Student participation and interactive evaluation. Participation: whether students actively participate in class activities and take the initiative to express their opinions and ideas.

Interaction effect: whether there is good interaction and communication between students and teachers and whether they can solve problems together. Independent learning ability: whether students are able to conduct independent learning and inquiry under the guidance of teachers.

6) Evaluation of classroom management and atmosphere building. Classroom discipline: whether students comply with classroom discipline and regulations, and whether teachers are able to deal with disciplinary violations in a timely and fair manner. classroom atmosphere: whether the classroom atmosphere is harmonious and harmonious, whether it is conducive to students' learning and thinking. emergency response: whether the teacher can properly deal with emergencies in class to ensure class order.

7) Assignment, correction and evaluation. assignment quantity and quality: whether the assignment is appropriate and covers the key and difficult points of the course; Whether the homework is carefully corrected, and whether the feedback and suggestions are targeted. innovative work: Whether students are encouraged to try innovative work, such as case studies, simulation decisions, etc.

8) Feedback and improvement evaluation. student feedback: Whether students have put forward valuable comments and suggestions on the case teaching content and methods?

Teacher reflection: Whether the teacher has reflected and summarized according to the teaching effect and students' feedback, and proposed improvement measures.

Evaluators can be lecturers, fellow faculty, students or teaching administrators. Evaluation methods can be quantitative (such as five-level rating system) or qualitative description (such as written evaluation).

5.2 Case teaching evaluation scale design

Based on the above literature analysis, this study intends to use the developed scale to further analyze the impact of the rationality of case writing on the effectiveness of case teaching, and use the mediation effect analysis method to explore the role path between the teacher's teaching attitude and the rationality of case writing and the effectiveness of case teaching.

The main points of case writing rationality test: the clarity of teaching objectives, the canonicity of case selection, the logic of case plot, the interest of case plot, the matching of case questions, and the openness of case questions.

Case writing requirements: the teaching goal is clear, so that teachers can explain theoretical knowledge points with cases; Clearly list the theoretical knowledge points of case teaching objectives; According to the teaching objective theory knowledge point, design the case plot; Able to use teaching theory to guide case analysis;

Case selection typicality: Can the selection of case events typically reflect the theoretical knowledge points of teaching objectives? Is it consistent with the theoretical knowledge points to be explained in the teaching objectives? Can you basically cover the theoretical knowledge points involved in the teaching objectives? Can present teaching theoretical knowledge points, and has the industry or region typical?

The logic of the case plot, a teaching case, can clearly describe the case plot according to a certain logical context? Can fully and completely state the background of the case events? Can clearly describe the circumstances of the case and the consequences of the story? Can present the time, space and plot of the case event? Can you describe the time node and context of key events clearly?

5.3 Data analysis and conclusion

In this study, AMOS23.0 software was used to test the validity of the model and verify the validity of the model. Then, descriptive statistical analysis and human correlation analysis were carried out with the help of SPSS23.0 software. The rationality of case writing is significantly positively correlated with the effectiveness of case teaching, the rationality of case writing is significantly positively correlated with the teaching attitude of teachers, and the teaching attitude of teachers is significantly positively correlated with the effectiveness of case teaching. At the same time, this paper further statistics the descriptive analysis and correlation analysis results of different dimensions of the two scales of the reasonableness of case writing and the effectiveness of case teaching. The results show that the clarity of teaching goals is significantly positively correlated with the dimensions of theoretical knowledge, practical experience and comprehensive ability. The typicality of case selection is positively correlated with theoretical knowledge dimension, practical experience dimension and comprehensive ability dimension. The logic of case plot is positively correlated with theoretical knowledge dimension, practical experience dimension and comprehensive ability dimension. There is a significant positive correlation between plot interest and theoretical knowledge dimension, practical experience dimension and comprehensive ability dimension

Further hypothesis testing is carried out: (1) To test the relationship between the rationality of case writing and the effectiveness of case teaching: the rationality of case writing has a significant positive impact on the effectiveness of case teaching, indicating that the total effect is established; (2) To examine the relationship between the rationality of case writing and the teaching attitude of teachers: the rationality of case writing is significantly correlated with the teaching attitude of teachers; (3) The relationship between the teaching attitude of the teacher and the effectiveness of case teaching: the teaching attitude of the teacher has a significant positive impact on the effectiveness of case teaching; (4) Finally, it is found that the influence of the rationality of case writing on the effectiveness of case teaching is decreased but still significant, and the mediating effect of teachers' teaching attitude is established. At the same time, it can be further concluded that the teaching attitude of teachers plays a part of mediating role between the rationality of case writing and the effectiveness of case teaching.

Robustness test: AMOS24.0 software was used to further test the structural equation. It is found that the standardized path coefficient values are significant, which again indicates that the teaching attitude of teachers plays a mediating role between the rationality of case writing and the effectiveness of case teaching, which is consistent with the analysis results of the original test method.

Group test: This study further carried out group regression test according to the control variable (the identity of participating in case teaching). The results show that the rationality of case writing

has a significant positive influence on the effectiveness of case teaching, indicating that the total effect is still valid. In the test of Model 2 and Model 5, the rationality of case writing has a significant positive effect on the teaching attitude of the teacher. Meanwhile, in the test of Model 3 and model 6, the teaching attitude of the teacher has a significant positive effect on the effectiveness of case teaching, and the rationality of case writing still has a significant positive effect on the effectiveness of case teaching. Therefore, it is proved again that part of the mediating role of the teacher's teaching attitude in the model is valid.

6. Conclusion

Based on the practice of management case teaching in China, combined with the classical literature in the field of business administration and the selection guide of 100 best cases, this paper constructs the reasonableness scale of case writing and the effectiveness scale of case teaching from the perspectives of teaching and learning. It includes the clarity of teaching objectives, the typicality of case selection, the logic of case plots, the interest of case plots, the matching of case questions and the openness of case questions.

Most teachers do not have a deep understanding of the case teaching method, and the effect of business administration case teaching needs to be improved.

With the transformation of industrial economy to knowledge economy, the management system changes from simple to complex, requiring management education to adapt to unpredictable complex forms. Changes aimed at developing managers should also be made.

Using the scale developed in this paper and the empirical method, we verify the mechanism of the rationality of case writing on the effectiveness of case teaching. The results show that the rationality of case writing has a significant positive impact on the effectiveness of case teaching, and the teaching attitude of teachers plays a part of mediating role between the two.

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