

Research Status and Enlightenment of Case Teaching Method—Taking the Course of Principles of Chinese Pedagogy as an Example

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Abstract: The course "Principles of Pedagogy" is a compulsory public course in China's normal universities and serves as a fundamental course for teacher certification. The quality of training normal school students is directly impacted by the teaching effect of this course. However, due to the course's excessive concept and objective limitations such as teaching duration and class size, most universities still employ traditional teaching models, resulting in an unsatisfactory teaching effect. This article aims to clarify the research review of case-based teaching methods, summarize the current research situation of using case-based teaching methods in the course of pedagogy principles, and propose suggestions for using case-based teaching methods in current Chinese universities to carry out pedagogy principles courses. The goal is to provide a reference for relevant research and teaching.

Keywords: Case teaching method; Teaching research; Current situation analysis; Enlightenment

1. Introduction

In 2021, the General Office of the Ministry of Education developed a work plan for the certification of normal education majors in ordinary universities. This plan requires provincial education administrative departments to establish a normalized, institutionalized, and standardized certification process for different levels of normal education majors. The promotion of normal education certification work aims to enhance the training of basic education teachers and provide high-quality normal students for China's education industry. The course "Principles of Pedagogy" is a compulsory course for students and teachers in normal universities and is an essential basic course for obtaining teacher qualification certificates. This course falls under the educational discipline category and aims to help students clarify basic concepts of pedagogy, construct a disciplinary framework system, understand the laws of education, master the ability to analyze and solve educational problems using theoretical knowledge of pedagogy, and cultivate students' enthusiasm and firm educational spirit. Therefore, for normal university students, learning public courses such as the principles of pedagogy requires systematic theoretical learning to master basic concepts, principles, and laws of education. This learning helps form correct educational and teaching concepts, enhance the ability to engage in educational practice, possess a sense of professionalism and responsibility for continuous innovation and development based on educational reform and development, and enhance awareness of strengthening teacher ethics and professional cultivation. Additionally, passing this course is necessary for students to effectively respond to the national recognition of the qualification examination for primary and secondary school teachers^[1]. However, due to the excessive definition of the concept of the course "Principles of Pedagogy," traditional lecturing modes of teaching are still widely used in colleges and universities. Teachers tend to ignore students' subjectivity in teaching and instill teaching in accordance with the textbook system, resulting in a disconnect between theory and practice. This disconnect makes it difficult for students to understand principles and concepts, leading to the inability to guide them for subsequent practical teaching.

Therefore, this article discusses the research summary of case teaching methods, clarifying the connotation of case teaching methods. Based on extensive reading of literature, this paper summarizes the current situation of using case-based teaching methods in universities and puts forward four targeted suggestions to help teachers improve their teaching methods and models. These suggestions aim to promote the development of normal school students' professional abilities.

2. Literature Review

2.1. Summary of Research on Case Teaching Method

The earliest instance of case teaching abroad can be traced back to the ancient Greek period. The renowned philosopher and educator, Socrates, advocated for dialogue-based heuristic education. Socrates aimed to reveal the essence of contradictions through continuous questioning, gradually guiding students to understand the scientific nature of truth and summarize general conclusions^[2]. Unlike previous education that blindly repeated authoritative assertions, this teaching method is full of logical reasoning and dialectical thinking, encouraging students to deeply ponder and analyze existing concepts. This teaching method helps cultivate students' ability to critically view issues and think independently.

In 1870, Professor Christopher Columbus Langdell, dean of Harvard Law School in the United States, first applied case methods of teaching to legal education. Subsequently, the case teaching method has been widely developed in the fields of medical education, economics, and business management, and is considered a successful future education model. Harvard University has played a crucial role in bringing case teaching methods to the world. Although Harvard Business School today uses diverse teaching methods, more than 80% of its courses are still taught using case teaching methods. After the 1970s, case teaching methods began to be used in the field of teacher cultivation. In 1986, the Carnegie Task Force of the United States released the report "A Nation Prepared: Teachers for the 21st Century," which fully affirmed the educational value of case-based teaching and pointed out that it is an effective teaching model for teacher cultivation.

The earliest research on case teaching methods in China can be traced back to the Spring and Autumn Period and the Warring States Period. Confucius was a famous educator in ancient China and a representative figure of the Confucian school. He was good at using "heuristic" teaching and coaxing disciples to put forward opinions and opinions on issues. Therefore, some scholars believe that Confucius' "heuristic" teaching has the earliest prototype of the case teaching method. However, after Confucius, China did not attach importance to the development of case teaching methods until the 1980s when Chinese leaders introduced case teaching methods during visits to the United States. The educational management community was the first to use this method and created a specialized academic publication, "Management Case Teaching Research." In 1987, "Management Case Studies," compiled by the Teaching Steering Committee for Management Engineering Major of the National Education Commission, was published, which is also the first book on management cases in China. At the beginning of the 21st century, Professor Zheng Jinzhou of East China Normal University published the "Case Teaching Guide," marking the entry of a new era of development in China's case teaching method. This book not only systematically expounds how to use case teaching methods in teaching but also promotes the in-depth development of case teaching methods in China. Currently, courses using case-based teaching methods are widely distributed, mainly covering fields such as marketing, law, business management, medicine, education, financial accounting, and so on.

2.2. The Connotation of Case Teaching Method

Currently, there is no clear definition of the case teaching method among international scholars. Kowalski proposed that the case teaching method is a teaching approach based on case studies that not only imparts conceptual knowledge but also cultivates students' abilities in logical reasoning, critical thinking, and problem-solving. Harvard Business School defines the case teaching method as an approach that focuses on real business management cases or challenging issues that students explore with teachers and classmates through independent learning. This method not only promotes teacher-student interaction but also stimulates students' curiosity and participation. According to Chinese scholar Shao Guanghua, the case teaching method can be simply defined as a teaching approach that utilizes cases. In the classroom, cases are presented in written form, and teachers and students jointly analyze, discuss, and evaluate them^[3]. According to Wu Gaochen, the case teaching method involves students utilizing scientific cases provided by teachers, applying their theoretical knowledge, and engaging in question and answer discussions to verify assumptions and draw reasonable conclusions^[4]. According to Professor Zheng Jinzhou's "Case Teaching Guide," the case teaching method is centered on teaching objectives and utilizes cases as a vehicle.

In summary, the case teaching method is an effective way to achieve the integration of theory and practice. To achieve the desired teaching objectives and content, teachers must carefully select, design, and arrange cases that reflect real-life situations. Through a two-way interaction between teachers and

students, teachers gradually guide students to engage in in-depth discussions and speak confidently, allowing them to discover, analyze, and solve problems in real-life cases while avoiding a fixed mindset. This discussion process not only fosters students' divergent and critical thinking but also enhances their ability to coordinate, communicate, and collaborate in teams. Therefore, the case teaching method is an open teaching approach that effectively avoids the rote learning associated with "cramming" education, enabling students to understand and apply knowledge based on their original cognition. This approach reduces cognitive load, promotes information processing, and establishes long-term memory.

2.3. Research Status of Case Teaching Method in China

In 1979, China adopted the case teaching method from foreign sources and began implementing it in various fields. A literature search was conducted on CNKI using the keywords "case teaching" and "case teaching method" for the period of January 2000 to December 2022, yielding a total of 30,000 relevant documents. The publication trend is depicted in Figure 1.

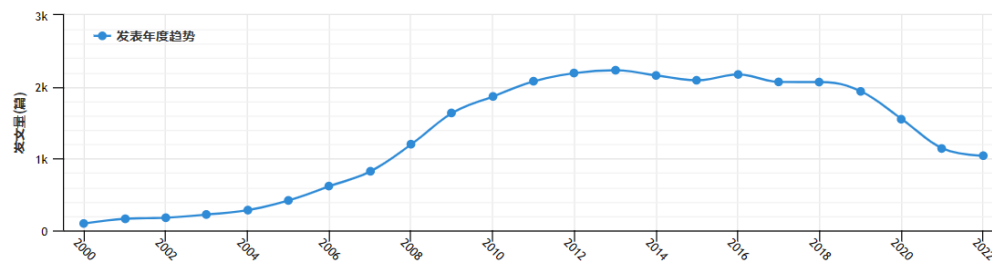


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According to Figure 1, domestic research on case-based teaching methods was in its infancy at the beginning of the 20th century, with an annual volume of no more than 200 articles being distributed. However, since 2002, research results on case-based teaching methods have increased year by year, and by 2012, the annual number of distributed articles reached 2100. From 2012 to 2018, the publication volume of papers related to case teaching methodology showed a flat trend, with the annual publication volume maintained at around 2000. Since 2018, the number of related research has gradually decreased, but the annual number of published articles remains at over 1000, indicating that the relevant fields are still in a stage of sustained development. Based on a comprehensive analysis of existing research results, it is found that the current research disciplines of case teaching methods are mainly in the field of higher education and vocational and technical education. This confirms that case teaching methods have requirements for learners' initial learning abilities, and students need to understand certain professional basic knowledge.

3. Application of Case Teaching Method to Principles of Pedagogy Courses in Colleges and Universities

In this article, we conducted a search of 101 Chinese documents in the China National Knowledge Network (CNKI) database using the theme "Case Teaching Method * Pedagogy". We eliminated irrelevant literature by browsing the title, abstract, key words, and main content of the literature, resulting in 64 articles. We utilized Citespace literature metrology software to collect and collate sample literature, and identified three main areas of focus among Chinese scholars regarding the use of case teaching methods to teach pedagogy principles courses in universities.

3.1. The Application Strategy of the Case Teaching Method in Teaching Pedagogical Principles

Zhang Baochen proposes that the implementation of the pedagogy case teaching method should adhere to the following principles: the scientific guiding principle, which prioritizes scientific research ability while ensuring scientificity; the methodological principle, which incorporates problem-solving and analytical skills; the principle of integrating theory with practice, which avoids an imbalance between theory and practice; the principle of broadening knowledge domains, which facilitates understanding of basic theories; and the principle of teaching students according to their aptitude, which promotes personalized development. Sun Hua summarizes the principles for selecting and applying case teaching in pedagogical principles: the principle of authenticity, which uses cases from practical life to guide

students to connect with their own reality and reveal the value behind the cases; the principle of problematality, which requires cases to contain urgent issues and contradictions that need to be addressed; the principle of typicality, which uses cases that are universal and reflect a class of educational phenomena, facilitating learning transfer; and the principle of mutual benefit between teaching and learning, which emphasizes the dynamic and open nature of the teaching process. Kuai Xiuli suggests that the application of case teaching in pedagogy teaching involves selecting educational cases, providing them in advance, establishing a cooperation team, presenting and discussing cases, and summarizing and reflecting on the cases. Some scholars propose a five-step application strategy for case teaching in pedagogical principles, which includes case selection, question presupposition, case presentation, case discussion, and case evaluation and reflection^[5].

3.2. The Significance of the Case Teaching Method in Teaching Pedagogical Principles

Ji Chengjun argues that incorporating practical teaching cases in pedagogy instruction can enhance students' comprehension of educational principles, cultivate relevant practical skills, and familiarize them with real-world educational scenarios. This approach can establish a strong foundation for future teaching positions. Proper citation of these cases is essential to support this teaching method^[6].

However, Wu Gang explores the significance of the case teaching method in public pedagogy teaching from six aspects: (1) facilitating students to obtain intuitive representations and understand complex educational practices, (2) helping students understand abstract educational theories, (3) developing comprehensive analytical skills and creativity, (4) promoting the organic combination of cognition and emotion, (5) achieving mutual benefit between teaching and learning, and (6) improving practical ability. Sun Hua (year) believes that the application of the case teaching method conforms to the "people-oriented" educational philosophy, effectively ensuring the subjectivity of students. Not only is it conducive to creating a vibrant classroom atmosphere, but it also helps cultivate students' team spirit and sense of collaboration. Yan Fuzong discussed the practical significance of the curriculum of pedagogy principles, including solving the contradiction between teaching and learning in the course of pedagogy principles, promoting students to acquire knowledge of pedagogical principles through internalization, and discussing the significance of using the case teaching method in the course of pedagogy principles from four aspects^[7].

3.3. Problems and Solutions of Using the Case Teaching Method in the Practical Teaching of Pedagogical Principles

Ji Chengjun identified two key issues that need to be addressed in pedagogy case teaching: case writing and case teaching. In terms of case writing, it is important to collect high-quality cases from across the country, organize teachers to write and share their own cases, and encourage students to collect integration cases during internships. Case discussion is a crucial test of teachers' flexibility and responsiveness, and therefore, both case preparation and discussion processes need to be carefully designed in advance. In her master's thesis, Du Chunjuan delved into six specific challenges associated with the case teaching model in public pedagogy. These challenges include: equating case teaching with example teaching, equating case teaching with group cooperative learning, difficulty in balancing the generality and specificity of knowledge, long teaching times, heavy workloads, large class sizes, and formalization of case questioning. Additionally, cases may not always be scientific or timely. To address these challenges, it is important to analyze case resources, teaching modes, infrastructure investment, and teacher quality, and to propose corresponding countermeasures in terms of work and evaluation mechanisms^[8].

Li Jinghui identified several issues with the current case teaching of public pedagogy in normal universities. These include the need to improve teachers' abilities in implementing case teaching, such as transforming teaching methods, selecting appropriate cases, and leading discussions effectively. Additionally, students may lack the necessary knowledge, experience, and autonomous learning skills to fully engage with case teaching. Finally, there are objective limitations to case teaching, such as a shortage of teaching cases, limited class hours, and a lack of assessment systems.

4. Enlightenment from the Application of Case Teaching Method in the Course of Pedagogical Principles

After conducting a systematic review, it has been concluded that Chinese scholars primarily

concentrate on the application strategies, teaching significance, problems to be resolved, and strategies of case teaching methods in the teaching of pedagogy principles in colleges and universities. Based on this, the present article suggests the potential benefits of implementing case teaching methods in the teaching of pedagogy principles in universities, focusing on four key aspects: case study, teaching, teachers, and students.

4.1. Collect and select adaptation cases to form an excellent case set

Cases are central to case teaching, and effective case teaching relies on appropriate and high-quality cases. However, one of the limitations of current case teaching in China is the lack of systematic, high-quality cases, which directly affects the smooth implementation of courses. The in-depth development of educational informatization has the potential to help teachers access cases through diverse media resources and promote high-quality cases to achieve resource sharing. When selecting cases, it is important to consider their relevance, authenticity, reliability, and difficulty rationally comprehensively. The purpose of cases is to serve teaching, so the selected cases should be closely related to the teaching content and objectives^[9]. The interpretation of the teaching focus improves as the case becomes more closely connected to core knowledge. The selected cases must be authentic and timely, and teachers should choose them based on their proximity to students' lives to achieve "learning for use." However, the difficulty of the case must also consider the students' cognitive level and acceptance ability. The author suggests that selecting, planning, and designing typical cases should not solely rely on teaching teachers^[10]. Firstly, professionals from various fields leverage their expertise and collaborate to compile and publish exceptional case collections, providing a valuable reference for frontline teachers. Secondly, teachers engage in teaching and research activities to collaboratively design and refine outstanding cases. Thirdly, students provide feedback on teaching cases during educational internships and internships, fostering discussion and communication between teachers and students. As students experience case situations firsthand, they can significantly enhance their classroom participation and understanding of educational theories^[11].

4.2. Follow case teaching principles and optimize case teaching procedures

Educational principles provide a general framework of teaching laws and basic requirements that must be observed during the teaching process. The application of different teaching methods necessitates adherence to various teaching principles. When utilizing the case teaching method to teach pedagogy principles, it is essential to combine the discipline's characteristics and attributes and comprehensively consider the case teaching method's specific requirements. The principles of authenticity, scientificity, and typicality should guide the case teaching approach. Teaching is a dynamic and open process that involves addressing problems and contradictions that arise^[12]. The approach utilizes question answering and group discussion to analyze problems and resolve contradictions layer by layer, ultimately achieving an organic unity between the teacher's instruction and the student's learning.

Through a literature review, the author summarizes the case teaching process into four main steps: case selection, case presentation, case discussion, and summary evaluation. These four aspects are both progressive and mutually influential. Teachers should prepare for teaching by selecting appropriate cases and using flexible and diverse methods to present them, such as situational teaching methods, role-playing, and multimedia assistance. During group discussions and Q&A sessions, teachers should raise questions about the cases, while students clarify logical relationships and construct a theoretical framework for education^[13]. Finally, it is important to design and develop case teaching evaluation metrics that reflect the diversity of evaluation. Teachers can comprehensively evaluate the entire learning process based on students' performance in multiple dimensions, such as analysis, judgment, cooperation, and communication, and play a positive role in incentivizing and guiding students. This process represents a general teaching procedure for case teaching. Depending on the specific teaching content, teachers can optimize the teaching procedure to ensure the smooth implementation of case teaching while targeting specific learning outcomes.

4.3. Improve teachers' professional quality and integrate multiple teaching methods

Teachers play a crucial role in case teaching, as their professional qualities directly impact their teaching ideas, methods, abilities, and effectiveness. To ensure that students in normal schools can grasp advanced and scientific educational concepts, teachers in public education at normal universities must update their educational concepts. The implementation of the "national examination" in the teacher

qualification examination has raised the difficulty of the exam and increased the requirements for candidates' teaching abilities and comprehensive knowledge. The assessment content is also broad, covering professional knowledge of the subject, teaching materials, teaching methods, and classroom teaching design. Therefore, the teaching of public pedagogy in normal universities must move away from the traditional classroom teaching method, where teachers solely focus on instilling ready-made conclusions and students passively absorb subject knowledge. In teaching, it is necessary to not only pay attention to the academic performance of normal students but also discover and develop their various potentials and understand their developmental needs. This will help normal school students recognize themselves and build self-confidence^[14]. Firstly, schools should organize case teaching training through various channels, such as inviting experts or experienced teachers to share their experiences, in order to enhance teachers' understanding of case teaching methods. Additionally, schools should establish a case teaching team and encourage teachers to participate in discussions and sharing, which can improve the professional quality of teachers in the process of polishing and optimizing typical cases.

Currently, most principles of education courses are taught in large classes with a class size of more than 50 people, which makes it difficult to carry out group discussions or achieve good results. In the face of such objective conditions, teachers should not only improve relevant hardware facilities and provide basic guarantees for the implementation of case teaching, but also exert their subjective initiative, change traditional educational concepts, and actively explore and practice different types of teaching methods. Teachers should choose appropriate teaching methods for different teaching contents and continuously improve their teaching ability.

For example, when using case teaching methods to carry out practical teaching, teachers should give full play to the main role of students in leading courses. Teachers should encourage students to share cases or even design cases based on their own internship experience. Alternatively, the entire class can be divided into different learning groups. For the same teaching content, each group selects one aspect to focus on, combining it with actual teaching cases to demonstrate and share. The entire process is not only about understanding knowledge, but also about comprehensively applying relevant knowledge based on analysis. This approach can help students reach the comprehensive level of Bloom's cognitive goal classification, cultivating high-level thinking among students. This kind of learning is true and valuable learning, rather than the rigid conceptualization of traditional teaching methods.

4.4. Consider students' initial abilities and change traditional learning methods

From the origin of case teaching, the essential teaching method has been the "question and answer method." This method places great importance on the learners' existing knowledge level, questioning the opinions of others, and forming their own opinions during continuous questioning and answering for a certain question, with strict logic. Similarly, the effective implementation of the case teaching method requires students to have corresponding initial abilities, and professional basic knowledge is the prerequisite for independent thinking. Otherwise, the opinions expressed by students may lack professionalism and have no reference value. Due to the long-term acceptance of traditional teaching and the habit of listening-based learning, many students are not adapted to the active discussion-based case teaching method, and the case teaching effect may even be worse than traditional teaching. To address the above issues, one solution is to assign pre-class preparation tasks. Teachers can present teaching cases to students in advance. Through extracurricular autonomous learning, students can participate in group discussions with ideas based on preliminary interpretation of the cases and learn to think and analyze issues from different perspectives through communication with others. The second solution is to have the courage to try different teaching modes, such as creating real case situations. Acting as a role in a case can effectively mobilize students' enthusiasm for participating in the classroom, quickly draw the distance between students and theory, strengthen the connection between theory and reality, and enable students to truly understand the logical connotation of educational theory. Third, it is important to pay attention to theoretical explanation. In practical teaching, it is necessary to grasp students' classroom freedom and respect their dominant position, but it is also necessary to properly guide students^[15]. Theoretical knowledge is a prerequisite for subsequent discussions. Therefore, it is necessary to balance the proportion of explanation and discussion and flexibly adjust the teaching duration based on the difficulty of the teaching content and the degree of mastery of the students. Fourthly, it is essential to establish an appropriate evaluation system that does not diagnose students using a single evaluation method. A multidimensional and clear evaluation scale helps to comprehensively measure students' comprehensive abilities. Through evaluation criteria, students can continuously adjust and optimize the learning process, making learning more purposeful and targeted.

5. Conclusions

In the 21st century, the focus of education has shifted from a knowledge-based approach to a quality-oriented approach. The combination of case-based teaching and pedagogical principles has largely overcome the shortcomings of traditional teaching methods and is a teaching method that seamlessly integrates theory and practice. The development of the case teaching method in educational practice can not only promote its own updating and iteration but also facilitate the emergence of other emerging teaching models. This article first reviews relevant research on case teaching methods at home and abroad. Based on the literature review, it summarizes the current research situation of using case teaching methods in the course of pedagogical principles and provides corresponding inspiration and suggestions, with the aim of improving the professional ability of normal school students and providing a reference for relevant educational research. The rapid development of the current network has also brought new vitality to the field of education. It is worth conducting in-depth research on how to better integrate information technology and case teaching in the future.

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