

Research on the Collaborative Teaching Model of “One Lesson, Multiple Teachers” in China Based on the OBE Concept

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Abstract

From a policy orientation perspective, China is increasingly focusing on the quality of talent cultivation and reform of teaching models. There is a gear effect between the OBE (Outcome Based Education) concept and the collaborative teaching model of “One Lesson, Multiple Teachers”, with the former setting design requirements for the latter, and the latter promoting the implementation of the former. This study constructs and analyzes the “One Lesson, Multiple Teachers” collaborative teaching model in various aspects such as teaching subjects, content, methods, procedures, and evaluation, with the aim of providing references for the perfection of this teaching model under the OBE concept.

Keywords

OBE, “One Lesson, Multiple Teachers”, Collaborative Teaching, Model Construction

1. Introduction

In October 2018, the Chinese Ministry of Education issued the “Opinions on Accelerating the Construction of High-level Undergraduate Education to Fully Improve Talent Training Capability,” which emphasizes “student-centered, all-around development” as one of the fundamental principles for constructing high-level undergraduate education. It also clearly proposed to “improve the collaborative education mechanism.” In October 2019, the Ministry of Education released the “Opinions on Deepening Undergraduate Teaching Reform to Fully Improve the

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Quality of Talent Training,” which discusses constructing a comprehensive multi-dimensional university teaching quality evaluation and assurance system, including student evaluations. The document mandates implementing quality consciousness, standards, evaluations, and management in all aspects of educational teaching as an important measure for deepening the reform of the education teaching system. In October 2020, the Central Committee of the Communist Party of China and the State Council issued the “Overall Plan for Deepening Educational Evaluation Reform in the New Era,” which calls for overcoming the phenomena of prioritizing research over teaching and instruction over education, reflecting the state’s requirements for teachers to focus on classroom teaching. In May 2023, the General Office of the Ministry of Education issued the “Action Plan for Deepening the Reform of Basic Education Curriculum and Teaching,” which, although aimed at China’s basic education, signals the intent to continue strengthening curriculum and teaching reforms at all stages of education in China. Against this backdrop, it is necessary to explore student-centered curriculum and teaching reform models aimed at improving students’ comprehensive qualities.

OBE (Outcome Based Education) is also known as Outcome Oriented Education, Competency Oriented Education, Goal Oriented Education or Demand Oriented Education in China. This educational philosophy emphasizes a student-centered approach (Zhi, 2022; Liu & Li, 2023), with educational effectiveness as embodied in the student as the main point of assessment. Currently, many schools have taken many measures to implement the OBE concept. Among them, the development of collaborative teaching is also an important means to effectively implement the concept of OBE education. Herman Haken sees “synergy” as the nature of coordination and cooperation among various elements during the overall development process (Feng et al., 2016). Collaborative teaching originated in the United States in the 1950s and has since become a widely accepted and popular teaching model in the USA and the UK. Collaborative teaching involves two or more teachers, based on the teaching content and their professional expertise, forming a teaching team to undertake teaching tasks for a group of students.

According to the definition in Chinese dictionaries, the term “Collaborative” inherently means “mutual cooperation” or “assistance.” Hence, in recent years, the concept of collaborative teaching has tended to generalize, expanding from the initial notion of “one lesson, multiple teachers” to include teacher-student collaboration, inter-school collaboration, industry-school collaboration, home-school collaboration, and the coordination between online and offline modalities (Zhang & Wang, 2023; Jiang & Li, 2023; Wang & Yuan, 2022; Cheng, 2017; Wu, 2022).

Nevertheless, collaborative teaching characterized mainly by “one lesson, multiple teachers” still occupies a significant proportion and is a beneficial attempt to enhance the quality of education and talent development. The current model of collaborative teaching with “one lesson, multiple teachers” in China is not yet perfect and requires continuous summarization of practical experiences and active theoretical exploration.

2. Literature Review

Recent international research focuses mainly on cooperative teaching. Some scholars believe cooperative teaching involves sustained collaboration between two or more teachers, with the central goal of organizing, directing, and assessing a group of students. Teams of teachers from different specializations can teach more efficiently through collaboration. Cooperative teaching requires the establishment of specific relationships and close cooperation among the teaching team members. The components of a cooperative teaching relationship include interpersonal communication, physical arrangements, familiarity with the curriculum, goals, teaching plans, presentations, classroom management, and assessment (Rashed, 2018). There are many reasons for teachers to engage in collaborative teaching, such as improving students' learning outcomes and promoting teachers' professional expertise. Collaborative teaching enriches the experience of all participants and requires a specific context and a collaborative environment (Kalchman & Kozoll, 2018). Some scholars have studied how members of teacher teams depend and support each other, collectively developing teaching plans and working together to achieve common educational goals (Chian et al., 2021). Teachers exercise high levels of autonomy and agency in collaboratively designing learning units and teaching content, making these relevant, engaging, and informative for students. Even if teachers do not participate in every stage of the design process, they can easily implement the learning units and teaching content due to the presence of a collaborative mechanism (Salonen et al., 2019). Teachers transform teaching methods through collective collaboration, according to situational changes and societal development needs, extending teachers' adaptability from an individual to a collective and community level, achieving systematic connections between teaching flexibility and cooperation (Yang et al., 2023). Some scholars, focusing on South Korean elementary English classrooms, analyzed five video recordings to summarize two English cooperative teaching models. One model involves interaction among the lead teacher, the assisting teacher, and the students, with the teacher leading classroom instruction and discussions; the other involves the lead and assisting teachers helping each other to achieve teaching objectives or to address difficulties encountered (Jae-Eun, 2014). Some scholars suggest that cooperative teaching should be implemented during student teaching internships. Using open-ended questionnaires, Likert scales, and individual interviews, the study gathered views on cooperative teaching models from teacher candidates, cooperative teachers, and university administrators. The results indicate that teacher candidates, university administrators, and cooperative teachers all view the use of cooperative teaching models during student teaching as beneficial for both pre-service candidates and classroom students, provided there is appropriate professional development and continuous reflection and planning (Hartigan, 2014). Some scholars believe that teacher-student interaction in the teaching process is also a form of cooperative teaching, which serves as communication and emphasizes the importance of es-

establishing a cooperative mechanism (Osuna & Munson, 2024). School leaders play a significant role in promoting teaching reforms. Case studies by some scholars have found that leaders who approach collaborative teaching with cautious optimism, as opposed to those who are overly optimistic and may underestimate the challenges of implementation, tend to provide more thoughtful support (McTigue et al., 2023). Information and communication technology facilitates collaboration among teachers across schools, such as in the Global Read Aloud (GRA) project where students and teachers from different schools read together through information technology. However, this type of collaboration relies not only on technological development but also faces logistical and internal assurance challenges (Carpenter et al., 2022). To date, some scholars believe that research on how teachers conduct collaborative teaching is still insufficient. The relationship between team collaborative teaching and individual teacher professional development remains unsmooth (Rytivaara et al., 2024).

The earliest introduction of the “one lesson, multiple teachers” teaching mode in China was in the field of art education. The main feature of this teaching mode is the collaboration of multiple teachers. Multiple teachers work together to complete the teaching tasks of the course, enriching, diversifying, advancing, and innovating the course through complementary advantages. In the application process of the “one lesson, multiple teachers” teaching mode, there are five effective application strategies: establishing a system of main lecturers for professional course teaching, developing rigorous modular teaching plans, forming interdisciplinary teaching teams, organizing the writing of loose-leaf course teaching materials, and establishing supporting teaching assessment management systems (Chai, 2023). It is possible to construct professional development standards for each teacher in the “one lesson, multiple teachers” model from four aspects: professional ethics, teaching ability, research ability, and professional development, and to improve the teacher training support system by comparing the standards, systematically guiding teachers to improve their professional qualities and abilities, and promoting the development of teachers in the “one lesson, multiple teachers” model from various perspectives and angles (Liu, 2023). Current issues in traditional teaching processes include a single course teaching method, insufficiently cutting-edge course content, low standardization of course design, weak targeted levels of courses, and loose course teaching management (Sun et al., 2021). In the specific implementation process of multi-teacher collaborative teaching, the following challenges need to be overcome: complex internal course connections leading to increased teacher workload, increased teaching management difficulty, and significant challenges in effective coordination among teaching subjects (Xiang & Zhang, 2022). Researchers have found that in the collaborative teaching process of “one lesson, multiple teachers,” teachers are more flexible in teaching methods, more innovative in teaching, and students’ learning is more targeted. Classes using the “one lesson, multiple teachers” teaching model have higher average grades than those using traditional teaching mod-

els. Additionally, according to surveys, students using the “one lesson, multiple teachers” teaching model can adapt to work better and faster when moving into internships (Li, 2023).

Combining existing research, the main characteristics of “one lesson, multiple teachers” collaborative teaching include: 1) Diversification of subjects. On one hand, multiple teachers deliver the lectures, and on the other, interaction with students is strengthened through integrating teaching methods such as flipped classrooms to enhance student initiative. In this process, the teacher team members need to collaborate effectively. 2) Rich content delivery. Teachers from different specialties can provide students with a wealth of knowledge, expanding their horizons. 3) Stimulating student interest. Different teachers focus on different content and have distinct teaching styles, which along with certain cooperative techniques, make students more interested in their courses. 4) Teacher level enhancement. This approach allows for improvements in teachers’ professional competencies and teaching quality from various perspectives; team members can jointly discuss disciplinary knowledge and methodologies, learn from one another’s teaching experiences, and share educational resources, thereby elevating the teaching standard. It also enhances team cohesion and collaborative skills as team members understand, trust, and support each other, aligning more closely with educational objectives. Furthermore, through collaborative teaching, team members can observe and critique each other’s teaching, identify issues and areas for improvement, and engage in self-reflection and progress.

3. The Gear Effect of OBE Educational Philosophy and “One Lesson, Multiple Teachers” Collaborative Teaching

3.1. Design Requirements Proposed by OBE Educational Philosophy for “One Lesson, Multiple Teachers” Collaborative Teaching

The OBE philosophy emphasizes the effectiveness of education and teaching, with the goal of genuinely enhancing student abilities and qualities. This philosophy sets forth demands for classroom teaching design. It requires that the concept of student-centeredness be the guiding principle in constructing the “one lesson, multiple teachers” collaborative teaching model and its practical advancement. When building this model, the OBE philosophy should be reflected in all links of teaching, including the subjects and objects of teaching, content, methods, procedures, and evaluation. In the process of integrating the OBE philosophy, attention should be paid to the organic combination of direct representation and indirect integration. On the one hand, the design process should directly reflect the effective cultivation of student abilities and qualities, and on the other hand, it should focus on enhancing the teaching ability of teachers and the overall level of the teaching team, thereby ensuring the cultivation of young talents that meet set objectives.

3.2. The Promotion and Implementation of OBE Educational Philosophy by “One Lesson, Multiple Teachers” Collaborative Teaching

In constructing the “one lesson, multiple teachers” collaborative teaching model, multiple aspects such as the subjects and objects of teaching, content, methods, procedures, and evaluation are involved. Each aspect can be designed around outcomes, competencies, goals, or needs orientation, thereby effectively promoting and implementing the OBE philosophy. For instance, clarifying the subject-object relationship in the collaborative teaching model helps to enhance the subjective initiative of the teaching team, thereby better guiding and cultivating students. In the design of teaching content, the teaching team should convey their latest scientific research and the most cutting-edge professional knowledge to students, thereby expanding the students’ professional horizons and improving their professional abilities and overall quality. In the design of teaching evaluation, importance should be given to student evaluations of teaching, with systems such as scoring, discussion, and anonymous questionnaires used to capture students’ genuine feedback, truly implementing the student-centered approach.

4. Construction of the “One Lesson, Multiple Teachers” Collaborative Teaching Model

Based on the five main links involved in “one lesson, multiple teachers” teaching, a “five-dimensional collaboration” teaching model can be designed.

4.1. The Subject and Object of “One Lesson, Multiple Teachers” Collaborative Teaching

From an epistemological perspective, the subject engages in cognitive and practical activities, while the object is the target of these activities and enters the domain of subject activity, typically requiring a medium for interaction (Gao, 2004). In the “one lesson, multiple teachers” collaborative teaching model, the relationship between subject and object can be viewed from two perspectives: from the teaching perspective, the team of teachers is the subject, students are the objects, and knowledge is the medium; from the learning perspective, students are the subjects, knowledge is the object, and the teaching team is the medium. Clarifying the relationship between the teaching subject and object helps to leverage the subjective initiative, improving teaching quality and effectiveness. The teaching team should both enhance their sense of subjectivity, fully considering student characteristics in the planning of teaching design, implementation, and evaluation to truly adopt a student-centered approach; and also appropriately switch to the role of the medium, fostering student engagement and self-learning capabilities, with teachers playing a guiding and supervisory role. Unlike traditional teaching, members of the course teaching team can utilize the “reverse barrel principle,” with the most proactive teacher taking the lead, thereby motivating other teachers to participate more actively in collaborative teaching.

4.2. The Content of “One Lesson, Multiple Teachers” Collaborative Teaching

The collaboration of multiple teachers in teaching a single course facilitates the diversification and three-dimensionality of teaching content, which is one of the notable advantages of the “one lesson, multiple teachers” collaborative teaching model. Teachers should leverage the team’s strengths and enrich the teaching content, while sparking student interest and expanding their professional horizons. The distribution of teaching content should be based on different collaboration methods, teacher backgrounds, and expertise. The course content design must meet the objectives of professional talent training, reflect modern educational thought, and integrate the latest scientific research and educational reform achievements of the teaching team into theory-based course instruction, allowing students to frequently encounter different teachers’ research outputs within a single course. In the design of experimental or practical course content, attention should be paid to balancing technicality, comprehensiveness, and exploratory nature. Team members can achieve effective collaboration through content segmentation or joint guidance, thereby enhancing students’ practical and innovative abilities. In organizing teaching content, the advantages of “one lesson, multiple teachers” should be fully utilized, combining teachers’ strengths, linking theory with practice, and integrating knowledge transfer, ability development, and quality education, with even more evident effects in the collaborative teaching of practical courses. It should be noted that under the “one lesson, multiple teachers” collaborative teaching model, the diversification and three-dimensionality of teaching content should be conducted within the framework set by the teaching plan and course syllabus.

4.3. The Methods of “One Lesson, Multiple Teachers” Collaborative Teaching

Under the “multi-teacher collaboration” teaching model, the teaching team can not only bring a more diverse and three-dimensional knowledge structure to students, but also utilize the advantage in numbers to implement a variety of teaching methods, such as lead-teacher, equal-participation, AB-role, thematic, and co-teaching approaches, among others. In the lead-teacher approach, one instructor takes the helm with assistance from others. The lead teacher plays a pivotal role in all aspects, including curriculum design, lesson planning, classroom instruction, and team coordination, and is generally an experienced teacher or the one most proficient in the course content. The equal-participation approach refers to a collaborative teaching method where all participating instructors are roughly equally involved in lecturing, as well as in drafting the curriculum and lesson plans, and in grading. This method is suitable when all members of the teaching team are well-acquainted with the course or when the course content is clearly modular. AB-role indicates a team with only two teachers, who may adopt a lead-teacher or equal-participation approach, thus AB-role can be seen as a special form of these methods. The thematic approach involves

dividing the course content into specialized topics, usually with each topic occupying a similar number of class hours, and often features some fluidity among teaching team members, such as inviting external experts for lectures on certain topics. This method is best suited for cutting-edge professional courses. Co-teaching refers to two or more teachers being present in the classroom at the same time, collaborating in a dialogic, supplementary, or group-work fashion to enrich the teaching forms and enhance teaching effectiveness.

4.4. The Procedure of “One Lesson, Multiple Teachers” Collaborative Teaching

The development of professional training programs is generally led by the head of the discipline, with the participation of all teachers. Teams engaged in “multi-teacher collaboration” must actively participate in the formulation of teaching plans and syllabi, determining the semester settings for courses, and the prerequisite and subsequent relationships with related courses. The lead teacher or the entire team, in accordance with course construction standards and taking into account the actual situation of students, analyzes the textbook content, sets teaching objectives, designs the teaching schedule, and allocates individual tasks. In terms of teaching organization and management, besides completing tasks at the school, college, and department levels, the teaching team should also engage in collective lesson planning, ideally selecting a lesson planning leader, ensuring all members truly participate, and exchanging ideas on achieving teaching objectives, refining course content, utilizing modern teaching means, and applying advanced teaching methods (Zhang, 2017). In addition to group lesson planning, it is also necessary for team members to observe each other’s classes to learn from each other’s experiences or to discuss details that could be further refined. During lesson preparation and class observation, each teacher is an active participant, a co-responsible party, and a sharer of wisdom, ultimately realizing both individual and team growth and development. In terms of team building, it is preferable for experienced or key teachers to mentor young teachers, facilitating the transfer of knowledge and skills to help them develop rapidly. Team members should strengthen their sense of responsibility and possess a strong spirit of collaboration, a reasonable structure of knowledge, academic connections, and age distribution, and they must also update their knowledge and receive training in teaching methods and tools in a timely manner.

4.5. The Evaluation of “One Lesson, Multiple Teachers” Collaborative Teaching

Like the evaluation of traditional teaching models, the evaluation of the “multi-teacher collaboration” teaching model is primarily based on the comprehensive development of all students in moral, intellectual, physical, and aesthetic aspects, covering aspects such as teaching attitude, content, methods, capabilities, summaries, and outcomes, with the evaluation of teaching effectiveness being particularly important. Objective and fair assessment of teaching quality relies on a

scientific and reasonable evaluation system, which must consider specific differences between courses, students' diverse requirements for teachers and teaching, and the tendencies towards certain evaluation indicators (Wang, 2019). The evaluation of teaching quality should run throughout the teaching process (Yan et al., 2021), analyzing each indicator at important time points, such as at the term's end based on student exam results and teaching summaries that include student growth records, to judge whether the teaching team has carried out teaching according to established measures, whether teaching objectives have been achieved, and to provide suggestions for improvement, thereby serving as a reference for team members to enhance teaching quality. Adhering to a student-centered approach, valuing student evaluations, refining evaluation standards, and organizing students to participate in evaluations through the evaluation system are essential (Tang, 2021). This can also be achieved through discussions, anonymous surveys, or experimental methods such as pre-post comparisons within the same cohort or comparisons with students from other classes. Compared to the "one-teacher, one-class" model, the "one lesson, multiple teachers" collaborative teaching is still a niche model with higher coordination costs and represents a certain challenge to teachers and students with lower adaptability. Therefore, it should only be promoted where its effectiveness is evident.

5. Conclusion and Discussion

The education philosophy of Outcome-Based Education (OBE), which centers on student development, goal orientation, and emphasis on outcome production, presents design requirements for the "one lesson, multiple teachers" collaborative teaching.

Conversely, the "one lesson, multiple teachers" collaborative teaching can implement and promote the OBE philosophy, creating a synergistic effect. When constructing the "one lesson, multiple teachers" collaborative teaching, it can be divided into various components, including the main body of teaching, content, methods, procedures, and evaluation. Within this framework, by leveraging the strengths and initiative of the teaching team, enriching content, diversifying teaching methods, standardizing procedures, and scientifically designing indicator systems and evaluation methods, the educational goals can be more effectively achieved.

The "one lesson, multiple teachers" collaborative teaching model requires teacher team members to coordinate effectively in defining and harmonizing teaching entities, designing content, choosing teaching methods, and formulating teaching procedures, including syllabi and organizational management, as well as evaluating teaching outcomes. The professional backgrounds of teachers should be similar yet distinct in specific areas, with diverse teaching styles and a reasonable structure of ages and titles. They should also possess a high recognition and enthusiasm for the collaborative teaching model. Under these conditions, the quality of teaching by instructors employing the "one lesson, multiple

teachers” model is likely to improve. Additionally, the quality of student training can be assessed through methods such as surveys, interviews, and comparative analyses between control and experimental groups, thereby evaluating the effectiveness of the “one lesson, multiple teachers” collaborative teaching model.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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