



Development of Music Teaching Practice in Middle Schools Course Based on Team-Based Learning (TBL) Combined with Peer Assessment Method

Guo Fiefei¹, Wassaporn Jirojphan² and Phithack Nilnopkoon³

¹Ph.D. student, Curriculum and Instruction Program, Valaya Alongkorn Rajabhat University under the Royal Patronage, Pathum Thani Province, Thailand

^{2,3}Lecturer, Curriculum and Instruction Program, Valaya Alongkorn Rajabhat University under the Royal Patronage, Pathum Thani Province, Thailand

E-mail: 1377124301@qq.com, ORCID ID: <https://orcid.org/0009-0006-8633-5232>

E-mail: Wassaporn@vru.ac.th, ORCID ID: <https://orcid.org/0009-0007-6934-5372>

E-mail: phithacknil@hotmail.com, ORCID ID: <https://orcid.org/0009-0008-6063-9830>

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Abstract

Background and aims: With the continuous development and change of the national actual situation and educational policies, to adapt to the development of the era and the changing needs of students, improve the teaching quality and effect, and promote the professional development of teachers, establishing and improving the education curriculum system for middle school music teachers is an urgent task for cultivating middle school music teachers. The objectives of this research were as follows: 1) To study the background information focusing on course components, existing problems, and relevant educational theories for developing the Music Teaching Practice in Middle Schools Course based on Team-based learning (TBL) combined with a peer assessment method. 2) To develop the Music Teaching Practice in Middle Schools Course based on Team-based learning (TBL) combined with the peer assessment method.

Materials and methods: In Phase 1, the first step is to query relevant documents and obtain background information through content analysis; The second step is to use interview forms to interview 5 teachers and 15 students, and the data on existing problems is collected by the interview process and the voice record tool. The content analysis through the thematic coding analysis method is used for analyzing and summarizing collected data. In Phase 2, the researchers drafted course content, and 5 experts evaluated the course composition draft. After gathering the data, the data were analyzed for appropriateness.

Results: The components of the Music Teaching Practice in Middle Schools course, based on Team-based learning (TBL) combined with the peer assessment method, were: 1) Course principles, 2) Course objectives, 3) Course contents, 4) Course instructional strategy, 5) Course materials and resources, 6) Course evaluation methods. And these components had a good quality of appropriateness.

Conclusion: Through the analysis of background information, it is necessary to improve and develop a Music Teaching Practice in Middle Schools Course model that conforms to the actual music teaching in middle schools. The course document evaluation by experts shows that the Music Teaching Practice in Middle Schools Course, based on Team-based learning (TBL) combined with the peer assessment method developed in this study at a high level is satisfactory.

Keywords: Curriculum Development; Team-Based Learning (TBL); Peer Assessment Method

Introduction

Education is the country's major plan and the party's major plan, and the priority development of education is a major strategy of the party and the country. In the report of the 20th National Congress of the Communist Party of China made by General Secretary Xi Jinping, from the perspective of "implementing the strategy of rejuvenating the country through science and education and strengthening the support of talents for modernization", a special deployment was made for "running education that satisfies the people", highlighting the basic nature of education, Pioneering, and global status (Chunlan, 2022).

Promote policies, resources, and investments to further tilt towards teachers, guide normal colleges to adhere to "teacher-oriented" and focus on training teachers, support high-level comprehensive universities to carry out teacher education, ensure that the teaching team has sufficient sources of teachers,





and accelerate the replenishment of ideas Teacher of politics, music, art, and other subjects. China's teacher education has achieved high-quality development under the top-level design of the country's construction, and normal colleges need to play a key role in building a modern teacher education system (Ting, 2021).

The musicology major of Zhoukou Normal University has both regional representativeness and discipline demonstration. The goal is to meet the development needs of weak and scarce disciplines in regional basic education, and to cultivate applied music education talents who love education, can take root in basic education, and have excellent teacher potential (Zhoukou Normal University Music & Dance Department, 2023).

The Music Teaching Practice in Middle Schools is offered in the sixth semester, targeting third-year student teachers majoring in music. The purpose of this course is to enable students to understand the teaching objectives, tasks, and requirements of school music education, master the basic theories and general laws of school music education, familiarize themselves with the process, principles, content, and methods of school music teaching, master the basic skills of music classroom teaching, and be able to independently design music classes for primary and secondary schools.

However, with the continuous development and change of the national actual situation and educational policies, to adapt to the development of the era and the changing needs of students, improve the teaching quality and effect, and promote the professional development of teachers, establishing and improving the education curriculum system for middle school music teachers is an urgent task for cultivating middle school music teachers. This study aims to improve one of the core courses for cultivating middle school music teachers - Music Teaching Practice in Middle Schools - and provide a true and reliable basis for the development of subsequent educational practice courses.

Research questions

The research questions addressed by this research were as follows:

- 1) What is the background information focusing on course components, existing problems, and relevant educational theories for developing the Music Teaching Practice in Middle Schools Course?
- 2) What are the developed course components of the Music Teaching Practice in Middle Schools Course to enhance music teaching ability?

Research objectives

The objectives of this research were as follows:

- 1) To study the background information, focus on course components, existing problems, and relevant educational theories for developing the Music Teaching Practice in Middle Schools Course based on Team-based learning (TBL) combined with the peer assessment method.
- 2) To develop the Music Teaching Practice in Middle Schools Course based on Team-based learning (TBL) combined with the peer assessment method.

Literature Review

Curriculum development

In 1935, Caswell and Campbell first proposed the term "curriculum development" in their writings. After the 1950s, the term gradually replaced the commonly used terms curriculum making and curriculum building/curriculum construction in the original curriculum field (Jing, 2011). Previous studies have focused on different definitions of "curriculum development". Taba (1962) advocates an inductive model based on learner needs, emphasizing the importance of teacher involvement and dynamic adjustment through steps such as diagnosing needs, setting goals, selecting content, organizing content, selecting learning activities, and evaluating and adjusting. Beauchamp (1982) proposed from a systems theory perspective that curriculum development is a comprehensive process that includes planning, design, implementation, and evaluation, requiring coordination among multiple stakeholders to achieve educational goals. However, to this day, there is still no unified understanding of the definition of curriculum





development. The current understanding of curriculum development must not only consider many factors such as philosophy, history, culture, politics, psychology, and economics, but also pay attention to unique issues in the process, as well as goals, learning experience or content, organization, teaching, and evaluation. And general issues such as curriculum reform (Xiaoling, 2019). Curriculum development activities are a kind of planning work in nature, and curriculum development in colleges and universities can be understood as an activity of formulating students' study plans (Shunping, 2019). Curriculum development refers to the whole process of completing a curriculum plan. It includes stages such as determining teaching objectives, selecting and organizing course content, implementing courses, and evaluating courses (Zhuangwei, 2020).

Curriculum development in this study refers to the organic combination of educational objectives, teaching content, teaching methods, and evaluation methods through planning, design, and implementation processes based on certain educational principles and educational needs to formulate and implement a complete set of teaching program processes. It includes six aspects: Formulate course principles, determine course objectives, select course contents, determine course instructional strategy, select course materials and resources, and determine course evaluation methods.

Team-based learning (TBL)

Team-based learning (TBL) teaching model was founded in 2002 by Professor Michaelsen of Oklahoma State University and other scholars. To encourage students to use team resources for independent learning (Liwen, Rong, & Jun, 2016). Mody S K and Kiley J (2013) believe that Team-based learning (TBL) is a teaching method that promotes knowledge application with students as the main body, teachers as guides, and small teams as the foundation. It not only helps students to explore and practice knowledge application but also enhances their collaborative communication and self-learning abilities. A recent study (Chaomin, Dezhi, & Xiaolin, 2016) concluded that Team-based learning (TBL) is an inquiry-based cooperative learning teaching strategy around a teaching topic, which takes students' preparation before class, a preparation assurance test in class, and application-oriented exercise as the learning cycle. Another study (Lin, 2023) concluded that Team-based learning (TBL) refers to the teaching model in which students are grouped at the beginning of teaching. In the teaching process, students are oriented, problem-oriented, and group discussion is used as the learning model, to improve students' ability of independent inquiry and teamwork.

The researcher believes that Team-based learning (TBL) refers to the teaching process of organizing student teams to conduct course learning under the guidance of ability training objectives, with the teacher in the leading role, the student as the main body, the student team as the basis, and knowledge application as the starting point. Teachers rely on the complete course experience to organize student teams to conduct course learning. Students learn in this form, helping students to apply the knowledge learned to practice promptly. Through group discussion, teaching evaluation, and post-class reflection, students' ability to analyze and solve problems is cultivated to improve students' music teaching ability.

Team-based learning (TBL) is a team-based teaching method. In an earlier article, it was proposed (Abdulaziz, 2017) that in the specific teaching practice, Prabhu divides classroom teaching into three stages: "pre-task, task, and feedback". Harden, Jennifer, Jean, and Helen (2009) applied TBL pedagogy to the medical curriculum, which found TBL to encourage students to reflect on the tasks undertaken by medical professionals and their ability to perform these professional tasks themselves. TBL (Team-Based Learning) teaching method, as group cooperation as the core teaching method, includes the following steps: 1) Pre-class preview stage; 2) Individual student tests; 3) Formation of students' learning teams; 4) Team discussion; 5) Teacher review and summary; 6) Group activities; 7) Evaluation and feedback. Meanwhile, teachers should pay attention to providing timely feedback and suggestions (Yupeng, 2024). According to the research context of this article, the TBL teaching method is understood as a method of teaching in the form of group cooperative learning. The specific implementation steps are divided into two parts: one is the teacher activity part, which includes forming groups reasonably and organizing group construction; Conducting previews in groups; Personal preview test; Group preview test; Group application activities;



Teacher explanations and student evaluations; Evaluation of homework after class. The second part is the student activities section, which includes students engaging in relevant group-building activities; Students complete the pre-class preview assignments assigned by the teacher through group discussions; Students complete individual and group tests; Students engage in group application activities and showcase the results of group discussions; Students listen carefully to the teacher's explanation and conduct self-evaluation and group member evaluation; Students complete homework exercises after class (Jie, 2024). The investigator considers that the teaching process of Team-based learning (TBL) can be divided into the following eight steps: 1) Establishment of the TBL learning team. 2) Preview before class. 3) Personal test. 4) Teach the teaching content. 5) Group collaboration exploration. 6) Presentation of learning outcomes. 7) Feedback. 8) After-class reflection and summary.

Peer assessment method

In 1978, Kane and Lawler (1978) defined "peer assessment" as a way of evaluation. They proposed that the definition of peer assessment was "letting the group members judge the process by which each member of the group showed characteristics, behavior, and extent achieved", and summarized the three forms of peer assessment at the time, namely Peer Ranking, Peer Nomination, and Peer Rating. In 1995, Falchikov (1995) defined peer assessment, which expanded the subject of evaluation from individuals to groups and extended the evaluation method from scoring to giving specific comments. However, the positioning of the evaluation object was relatively vague. In 1998, the American scholar Topping compiled the scholars' theories about peer assessment into a literature review. In the review, Topping (1998) defined peer assessment as "the judgment of learners in terms of quantity, level, the importance of their peers and learning outcomes". At this point, the concept of "peer" is called "a learner with a similar level of learning". In addition, Topping and Ehiy (1998) maintain in their book Peer-assisted Learning that peer assessment focuses on learning products, such as writing, oral presentation, homework, testing performance, or other skills. In 2017 and 2018, Topping (2017) added key content to his previous definition of "peer assessment"; he believes that people should give detailed feedback. This study believes that peer assessment refers to the process in which students use relevant standards to evaluate the learning behavior and achievements of peers with similar learning levels.

In the opinion of the investigator, the teaching process of peer assessment can be divided into the following 5 steps) Clarify the purpose and process. 2) Formulate detailed evaluation criteria 3) Evaluate the performance of their peers 4) Provide and support 5) Praise and rewards.

The researchers in this article integrated the 5 steps of peer assessment in the 7th step of TBL and ultimately obtained the 8 teaching steps of the Teaching Process of Team-based learning combined with peer assessment. The detailed content is shown in Figure 1.

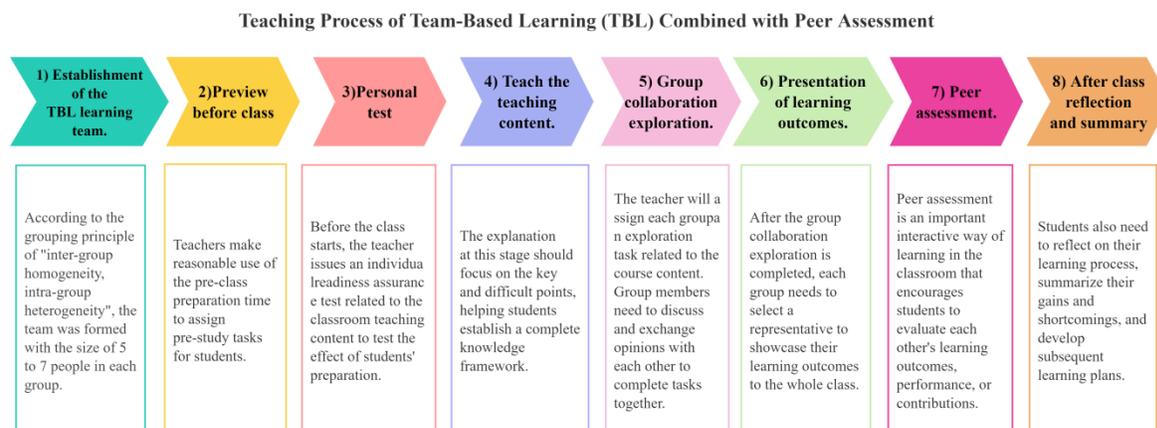


Figure 1 Teaching Process of Team-based Learning (TBL) combined with peer assessment.



This study comprehensively and systematically planned the Music Teaching Practice in Middle Schools Course based on the six steps of course development. In this process, researchers innovatively integrated team-based learning with peer assessment to form a new teaching strategy. Through this series of steps, researchers have developed a curriculum that meets both educational principles and student needs, injecting new vitality into middle school music education.

Conceptual Framework of the Study

Constructivism believes that knowledge is not acquired through teachers, but by learners through necessary learning materials, with the help of others in a certain context, namely the social and cultural background. Since learning is a process of meaning construction under the context of social culture, namely, with the help of others, through interpersonal cooperation, the constructivist learning theory holds that "situation", "collaboration", "conversation", and "meaning construction" are the four elements or four attributes in the learning environment. The zone of proximal development theory highlights the dominant and decisive role of teaching in development and reveals that the essential characteristics of teaching are not in the "training" or "strengthening" of already formed internal psychological function but in the stimulation and formation of the psychological function that does not exist at present. That is to say, only the teaching ahead of the development is good, and can effectively promote the development of students. Cheng (2023) believes that the TBL teaching model adheres to a student-centered approach and designs specific activity content for each stage from the perspective of students, including pre-class, in-class, and post-class stages. The pre-class stage includes building an efficient learning team, determining preview topics, and posting personal test questions online. The in-class stage includes teaching content, posting team test questions, observing and recording appropriate guidance, and evaluating team achievements. The post-class stage includes consolidating and reflecting on the lessons. Each stage is closely linked, assessing students from multiple aspects and dimensions, emphasizing the importance of helping students grasp knowledge content and achieve the goal and effect of combining theory with practice.

Research Methodology

Phase 1: Study the background information and focus on course components, existing problems, and relevant educational theories

□ **Study background information focusing on the study of course components, existing Problems from related documents**

Content areas included government policy related to Music Teaching Practice in Middle school courses, the current situation regarding Music Teaching Practice in Middle school courses, problems of Music Teaching Practice in Middle school courses from related research and university documents, Team-based learning (TBL), and Music Teaching ability. The research resources included a database of CNKI, SCOPUS, Google Academic Search, and the China Doctoral Dissertation full-text Database. The process of data collection was conducted through literature research. The process of data analysis was conducted through content analysis.

□ **Construction of interview questions for teachers and student teachers in this stage**

Constructing a teacher's interview form. The form of teacher interview in this study is aimed at the problems of the existing Music Teaching Practice in Middle Schools courses. The interview form includes five parts: the first part is the basic information of the respondents. Including the information of the interviewee, the place, and the time of the interview. The second part is the purpose of the interview. The third part is the content of the interview. There were 13 questions in the content of the interview, mainly including six aspects: course principles, course objectives, course content, instructional strategy, course materials and resources, and course evaluation. The fourth part is the interview record. The fifth part is the interview results. The quality of interview questions comes from the Index of Item Objective Congruence (IOC) obtained from five experts evaluating the draft interview questions, including 2 experts in the curriculum field, 2 experts in instruction relevant to specific content, and 1 expert in the measurement and





evaluation field. Through evaluating the interview questions for music teaching practice in middle school courses, and then calculating the formula according to the IOC. The ICC of each item of the interview questions was between 0.80-1.00, higher than 0.5. The result of analyzing the IOC showed that the interview questions for music teaching practice in middle school courses were appropriate and could be used in the interview.

Constructing student teachers' interview forms. The form of student-teacher interviews in this study is aimed at the problems of the existing Music Teaching Practice in Middle Schools courses. The interview form includes five parts: the first part is the basic information of the respondents. Including the information of the interviewee, the place, and the time of the interview. The second part is the purpose of the interview. The third part is the content of the interview. There are 12 questions in the interview, mainly including four aspects: course content, instructional strategy, course materials and resources, and course evaluation. The fourth part is the interview record. The fifth part is the interview results. The quality of interview questions comes from the Index of Item Objective Congruence (IOC) obtained from five experts evaluating the draft interview questions, including 2 experts in the curriculum field, 2 experts in instruction relevant to specific content, and 1 expert in the measurement and evaluation field. Through evaluating the interview questions for music teaching practice in middle school courses, and then calculating the formula according to the IOC. The IOC of each item of the interview questions was 1.00 higher than 0.5. The result of analyzing the IOC showed that the interview questions for music teaching practice in middle school courses were appropriate and could be used in the interview.

□ Interview teachers and student teachers relevant to the problems of the current course

Interview teachers' views and student teachers' views on problems of the existing Music Teaching Practice in Middle Schools courses. The sample of this study is 5 teachers of the Music Teaching Practice in Middle Schools course, 15 student teachers who used to study in the Music Teaching Practice in Middle Schools, derived from purposive sampling. The Research instruments for collection are interview teachers' interview forms and students interview forms. The data on existing problems is collected by the interviewing process and the voice record tool. After the interviews, the researcher used content analysis to analyze the collected data on current issues and course composition, and conducted a summary of qualitative data to understand the curriculum issues of the Music Teaching Practice in Middle Schools course.

Phase 2: Development of Music Teaching Practice in Middle Schools, Courses based on Team-based learning (TBL) combined with peer assessment method

□ Writing a draft curriculum components

Studying and determining the components of Music Teaching Practice in Middle Schools courses based on Team-based learning (TBL) combined with a peer assessment method, which consisted of the principles of the course, the objective of the course, the content of the course, the instructional strategy of the course, the materials and resources of course, evaluation of course.

The course development process includes the following steps: Formulate course principles, determine course objectives, select course contents, determine course instructional strategy, select course materials and resources, and determine course evaluation methods.

□ Evaluating the draft curriculum components by experts

Evaluating the developed Music Teaching Practice in Middle Schools course based on Team-based learning (TBL) combined with the peer assessment method to enhance course quality by experts. Five experts who evaluated course development consisted of 1 expert in the field of curriculum, 3 experts in the field of curriculum and teaching, and 1 expert in the field of measurement and assessment. The experts regard the appropriateness of each component of the developed course.

The instrument used for evaluating Music Teaching Practice in Middle Schools course based on Team-based learning (TBL) combined with peer assessment method was an appropriateness evaluation form which was a five-point rating scale ranging the level of appropriateness from very high level, high level, moderate level, low level, and very low level.





The researcher offered an evaluation form, which was a five-point rating, to a group of experts to examine or evaluate the Music Teaching Practice in Middle Schools course based on Team-based learning (TBL) combined with the peer assessment method. After gathering the data, the collected data were analyzed for the appropriateness of Music Teaching Practice in Middle Schools courses based on Team-based learning (TBL) combined with the peer assessment method.

Research Results

Phase 1 defines the problems existing in the current Music Teaching Practice in Middle Schools Course. The identification of these problems provides an accurate starting point for the curriculum development of Phase 2, and the curriculum development practice of Phase 2 is a targeted response to the diagnosis of Phase 1 problems. Together, they constitute a closed-loop research model of "theory guiding practice and practice verifying theory".

Phase 1: The first phase of studying the background information focuses on course components, existing problems, and relevant educational theories

□ The findings of studying the relevant documents

The findings of studying the relevant documents, which were collected, analyzed, and summarized by using thematic coding analysis or content analysis, could be summarized as follows:

1. Policies and regulations of the higher education curriculum at the national level

The state grants institutions of higher learning greater autonomy, allowing them to independently set up and adjust disciplines, majors, and courses according to the development of disciplines, social needs, and school positioning. Emphasize the establishment and improvement of the quality assurance system of higher education courses, and require universities to carry out regular curriculum evaluation and review to ensure the frontier, practical, and scientific course content. Encourage and support colleges and universities to reform and innovate in curriculum and teaching methods, advocate the adoption of modern teaching methods, and improve students' learning enthusiasm and innovation ability. Promote the internationalization process of higher education courses, support colleges and universities to introduce high-quality foreign educational resources, carry out international cooperation in running schools and mutual recognition of courses, and improve students' international vision and cross-cultural exchangeability. Strengthen the close connection between higher education courses and industry and society, encourage universities to cooperate with enterprises and industries to develop courses, promote the deep integration of industry, education, and research, and cultivate high-quality talents who meet the needs of society.

2. Policies and regulations of Higher Education Curriculum in Henan Province

Encourage provincial universities to develop higher education courses with local characteristics according to their characteristics and advantages to serve the needs of Henan's economic and social development. Promote course resource sharing and cooperation among universities in the province, establish a mechanism of mutual course selection and credit recognition, and promote cross-school course selection and learning exchange among students. Implement the plan to improve the teaching quality of higher education, strengthen the supervision and evaluation of the curriculum teaching in colleges and universities, and promote colleges and universities to continuously improve the quality and level of curriculum teaching. Support universities to cooperate with enterprises and industries in the province to develop industry-education integration courses, integrate the latest technologies, standards, and norms of the industry into the course content, and cultivate high-quality talents that meet the needs of the industry. Encourage colleges and universities to set up innovation and entrepreneurship education courses, cultivate students' innovative consciousness and entrepreneurial ability, and inject new vitality into the economic and social development of Henan province.

3. Policies and regulations of the Higher Education Curriculum of Zhoukou Normal University

According to the school orientation and talent training objectives, build a scientific and reasonable curriculum system to ensure the systematization and continuity of the curriculum. All





departments are required to update the course content regularly, introduce cutting-edge knowledge, the latest trends of the industry, and hot social issues, and maintain the timeliness and practicality of the course. Encourage teachers to adopt diversified teaching methods and means to improve the teaching effect of the course and students' interest in learning. Establish a course evaluation and feedback mechanism, regularly collect opinions and suggestions from students and teachers on the course, and continuously improve and optimize the course. Strengthen the construction and management of practical teaching links, ensure that students have enough practical opportunities and practical ability training, and improve students' practical ability and comprehensive quality.

□ The findings of the present course evaluation

The findings of evaluating the present course could be summarized as follows:

1. Teaching philosophy and objectives

Zhoukou Normal College Music Normal Professional aims to cultivate qualified middle school music teaching professional talents, "Middle School Music Teaching Practice" course is one of the main courses of this major, this course pays attention to cultivating students' teaching skills, education ideas, and innovative thinking, to meet the needs of the new era of middle school music teaching.

2. Course setting and content

The course covers the key fields such as music teaching procedures, teaching process, teaching mode, and methods, forming a relatively complete curriculum system. This course includes a combination of theory and practice. The theoretical part involves interdisciplinary fields such as education, psychology, and music teaching methods; The practice part includes teaching cases, etc.

3. Teaching resources and facilities

This course is equipped with relatively perfect teaching facilities, including a music classroom, multimedia equipment resources, etc., which provides good hardware support for the "middle school music teaching practice" course to ensure the quality and effect of teaching. The course is conducted by a team of teachers with rich teaching experience, including associate professors of music, teachers, and teachers who have won the Henan Provincial Teacher Teaching Grand Prix.

□ The findings of interviewing the key persons

The findings of interviewing key persons could be summarized as follows:

1. The findings of teacher interviews

The researcher interviewed five teachers of the Music Teaching Practice in Middle Schools Course from June 3 to 7, 2024. Teachers believe that although the principles of this course provide a certain guidance direction, they still need to be further improved and clarified in terms of student subjectivity, innovation, and flexibility of teaching methods, evaluation, and feedback. Some teachers believe that the curriculum objectives are not specific and clear enough, or they do not fully match the students' future music education career needs. Teachers believe that there are parts of the current curriculum content that need to be supplemented or adjusted. Some teachers believe that the current teaching strategies have a limited effect in promoting students' learning. Some teachers believe that the course materials currently used may be insufficient to support the teaching practice in some aspects and need to be updated or supplemented. Teachers believe that the current curriculum evaluation method cannot truly reflect students' learning results and practical ability in some cases.

2. The findings of student interviews

The researcher interviewed 15 students who used to study in the Music Teaching Practice in Middle Schools Course from June 11th to 18th, 2024. Students will encounter the parts that are difficult to understand or grasp in some course content, especially those with strong theoretical or high technical content. Some students believe that teaching strategies fail to effectively promote learning and are difficult to meet the learning needs of all students. They hope that teachers can make adjustments or improvements in teaching strategies. In the process of using the course materials, students encountered some problems or inconveniences, and some students were not highly satisfied with the materials. Some students think that the current course evaluation method is not fair and reasonable, and fails to fully reflect the students'





learning results and practical ability.

□ **The finding of relevant educational theories**

The findings of relevant educational theories could be summarized as follows:

The curriculum development goal model theory is a model of curriculum development based on clear educational objectives and centered around the determination, implementation, and evaluation of curriculum objectives (Haiping, 2022). It provides a clear and systematic framework for curriculum development, but it also needs to be continuously improved and adjusted in practice to adapt to different educational contexts and needs.

The curriculum development process model theory was mainly put forward by L. Stenhouse, a famous British expert on Curriculum theory. The core idea of this theory is to emphasize the intrinsic value and process of the curriculum, rather than just focusing on the achievement of the preset goals. It gives teachers full autonomy and attaches importance to formative evaluation (Yunxi, 2020).

The curriculum development practice model theory is an educational idea that emphasizes the practicality and dynamics of the curriculum. The theory advocates treating teachers and students as organic components and interacting subjects of the curriculum, and holds that the curriculum is an interactive organic "ecosystem". In this ecosystem, the goal of the curriculum is not only to impart knowledge but, more importantly, to meet the interests and needs of students and improve their abilities (Naiyuan, 2022).

Constructivist theory. The core point of constructivist theory is that knowledge is not acquired by teachers, but acquired by learners through the means of meaning construction with the help of others and the necessary learning materials in a certain situation, namely, the social and cultural background. This process emphasizes the subject position of learners and the importance of actively constructing knowledge in their interactions with the environment.

Zone of proximal development theory. It is an important concept in educational psychology, proposed by the Russian psychologist Lev Vygotsky. It refers to the gap between the current level of child development and the possible level of development, that is, the level of development that children may achieve through certain efforts or under the guidance and help of others. This area represents the potential and improved learning space for children (Jian, 2015).

Metacognition theory is an important psychological theory proposed by American psychologist John Flavell in the 1970s, which refers to the individual's self-awareness, self-monitoring, and self-regulation of their cognitive activities, that is, the cognition of cognition. It emphasizes that in the cognitive process, the subject not only pays attention to the cognitive object itself but also pays attention to their own cognitive process, strategies, and effects, to realize the effective regulation of cognitive activities (Tong, 2024).

Phase 2: The finding of Development of Music Teaching Practice in Middle school courses based on Team-based learning (TBL) combined with a peer assessment method

□ **The findings of the course development**

1. Course principles

The development of this course follows principles: 1) Student-centered principles. Curriculum design and implementation revolve around students, encourage students to participate actively, and give play to their initiative and creativity. 2) Innovate teaching methods. Various teaching methods are adopted to stimulate students' interest and motivation in learning and improve the teaching effect. 3) Comprehensive Development Goals. The course aims to promote students' 'all-round development and cultivate students' aesthetic tastes, values, and teachers' views. 4) Pay attention to evaluation and feedback. Establish a scientific evaluation system, give timely feedback to students, and promote continuous progress. 5) Emphasize theory and practice. Emphasize the close combination of theoretical knowledge and teaching practice skills, aiming to cultivate a solid foundation of music education talents.

2. Course objectives

The students will be able to describe the disciplinary cognitive characteristics and key content of musicology and explain the connotation of the new curriculum standards for middle school. Students can





design teaching plans and have the ability to give lectures independently. Students have a correct view of the teaching profession, a positive and proactive attitude, a positive aesthetic taste, and correct values.

3. Course contents

Based on the course rationale, course objectives, and students' needs, the course content is determined, as shown in the following table:

Table 1 The content of Music Teaching Practice in Middle Schools Course based on Team-based learning (TBL) combined with peer assessment method

No.	Items	Contents
1	Import and End skills	(1) Import skills. (2) End skills.
2	Effective questioning and explanation skills	(1) Effective questioning skills. (2) Effective explanation skills.
3	Strengthening and feedback skills	(1) Strengthening skills. (2) Feedback skills.
4	Mini class Theory	(1) Characteristics of Mini class. (2) Type of Mini class. (3) Content of Mini class. (4) Process of Mini class. (5) Requirements of Mini class.
5	Mini-class Case analysis	Case Study of Mini Class in 'Desire for Spring'
6	Mini-class Program for practical training	Design of Mini Class Scheme for The song 'Singing the Motherland'
7	Mini class Practice case analysis	Case Study of Mini Class Practice in 'Guerrilla Song'
8	Classroom simulation practice	Choose either one of the two songs When I Grow Up, I will Be You' and ' Yao Dance' to simulate a mini class in class.

4. Course instructional strategies

The teaching strategy for this course is Team-based learning (TBL). Taking the one-class teaching as an example, the Team-based learning (TBL) teaching strategy is presented specifically. The teaching process is as follows:

Step 1: Establishment of the TBL Learning Team

Teachers assign students to different teams according to the principle of heterogeneous grouping to ensure that the team members are diverse and complementary in terms of gender, personality, academic performance, etc. There are 25 students in this class, 5 groups of 5 students, divided into 5 groups, including 2 groups that have 2 boys and 3 girls, and the other 3 groups have 1 boy and 4 girls.

Step 2: Preview Before Class

According to the teaching content, the teacher determines the teaching objectives and the teaching key and difficult points of the class, issues the learning tasks through the WeChat platform, asks the students to preview the chapter on "Effective questioning and explanation skills" in the textbook "Music Micro Teaching", and inform the students that the personal preparation test will be conducted in class. After the teacher releases the learning task, the students will preview it before class.

Step 3 Personal Test





The teacher designs the personal test questions before class and conducts the 5-minute personal preparation test at the beginning of the class. The personal preparation test consists of 6 multiple-choice questions and 2 multiple-choice questions. The assessment content is mainly the overview, function, type, principle, and evaluation of effective questioning skills and effective explanation skills. Understand the students' pre-class preview situation, and the students will complete the personal preparation test independently.

Step 4: Teach the Teaching Content

Through personal tests, teachers quickly assess the completion of the students, preliminary understanding of students' effective question skills, and effectively explain the cognition of cognition. In view of the problems existing in the assessment of knowledge, the teacher of common problems guides students to view the learning data analysis reason, and consolidate internalized basic knowledge.

Step 5 Group Collaboration Exploration

According to the preview results before class and the understanding of the teacher after the explanation, each group entered the group cooperative learning link with the problems to be solved (the effective questioning skills and the overview, function, type, principle, and evaluation of the effective explanation and questioning skills). Each group shall divide the work according to the plan, independently collect, share information, and pool wisdom. In this process, the team members communicate with each other and discuss the questions (effective questioning skills and effective explanation skills) to solve the problems in the discussion. If any problems cannot be solved in the group, you can communicate with the teacher.

Step 6 Presentation of Learning Outcomes

Each group is led by a student representative of the composition, introducing the overview, function, type, principle, and evaluation of effective questioning skills. After the representative's speech, the group members can make a supplementary presentation.

Step 7 Peer Assessment

After the presentation of each group, the teacher explains the missing places and the problems, so that each student can understand the effective questioning skills and the effective explanation skills. All groups will evaluate each other, and then select the best group in this class. Students in each group evaluate each other, and then select the best student in each group in this class.

Step 8: After Class Reflection and Summary

After class, teachers interact with students through the WeChat platform to jointly solve problems that have not been fully understood in the classroom learning process.

5. Course materials and resources

Choose textbooks: Music micro-grid teaching (the 13th Five-Year Plan for colleges and universities in Zhejiang Province). By Cui Xuerong et al. Beijing: Higher Education Press, 2020.

Main bibliography: Middle school music textbook research and teaching design. Lu Kang'e. Xi'an: Shaanxi Normal University Press, 2018. Music teaching design of new courses. Yin Hong, Zou Rongsheng. Chongqing: Southwest Normal University Press, 2020. Music teaching design. Cao Li, Cui Xuerong. Shanghai: Shanghai Education Press, 2002. Teaching skills of middle school music teachers ("12th Five-Year" undergraduate higher education). Lu Kang'e. Xi'an: Shaanxi Normal University Press, 2015.

6. Course evaluation methods

The comprehensive score evaluation method includes process evaluation and outcome evaluation, with process evaluation being classroom presentation and stage testing, and outcome evaluation being the final assessment.

The proportion of the comprehensive score composition is shown in the table below:





Table 2 The proportion of the comprehensive score composition

The proportion of comprehensive scores is constituted		
final assessment	stage testing	classroom presentation
100 Points	100 Points	100 Points
60%	20%	20%

□ **The findings of the course document evaluation by experts**

This step aimed to determine the quality of the draft course document before its implementation. The draft course document was evaluated by experts regarding the appropriateness of each component of the draft course. The findings of the course evaluation, which were collected and analyzed, were presented in Table 3 as follows:

Table 3 The findings of the course evaluation by experts

No	Items	<i>M</i>	<i>SD</i>	Interpretation of appropriateness
1	Course principles are clear and concise	4.40	.89	High level
2	Course principles cover the core values and concepts of music education	4.20	.84	High level
3	Course principles have practical guiding significance	4.60	.55	Very high level
4	The course objectives are specific and measurable, and can guide students' learning direction	4.40	.89	High level
5	The course objectives are compatible with the student's age, cognitive level, and the development of music literacy	4.40	.89	High level
6	The course objectives are challenging and can stimulate students' motivation to learn	4.80	.45	Very high level
7	The course content has a clear structure and strict logic, forming a complete knowledge system	4.40	.89	High level
8	The course content is close to the practice of middle school music teaching	4.20	.84	High level
9	The course content is practical and operable	4.40	.89	High level
10	Teaching strategies can adapt to the teaching content and students' characteristics	4.40	.89	High level
11	Teaching strategies can effectively improve the teaching effect	4.20	.84	High level
12	The teaching strategy focuses on the interaction between teachers and students and students, to create a good classroom atmosphere	4.40	.89	High level
13	Teaching materials are rich and varied	4.40	.89	High level
14	The teaching materials are closely related to the course content and can meet the needs of teaching activities	4.40	.89	High level
15	The quality of the teaching materials is accurate, authoritative, and easy to understand	4.40	.89	High level
16	The evaluation method is objective and fair, and can truly reflect the student's learning results and teaching effect	4.60	.55	Very high level
17	Multiple evaluation methods are used	4.40	.89	High level
18	Teaching evaluation can give students timely feedback, help them understand their learning status, and improve their learning methods	4.40	.89	High level

As presented in Table 3, it was revealed that items 3, 6, and 16 have mean scores higher than 4.51; appropriateness is very high level, the remaining 15 items have mean scores higher than 3.51, and





appropriateness is high level. The components of the Music Teaching Practice in Middle Schools course, based on Team-based learning (TBL) combined with the peer assessment method, had a good quality of appropriateness.

Discussion

Research conclusion

□ The research conclusion of studying background information for course development

The researcher analyzed and studied the government policy information, relevant documents, current status, existing problems of the Music Teaching Practice in Middle Schools Courses, and relevant educational theories, and believed that it was necessary to improve and develop a Music Teaching Practice in Middle Schools Course model that conforms to the actual music teaching in middle schools.

□ The research conclusion of developing the Music Teaching Practice in Middle Schools Course is based on Team-based learning (TBL) combined with the peer assessment method.

The researcher analyzed the current status of the Music Teaching Practice in Middle Schools Course to address the problems in the Music Teaching Practice in Middle Schools Course. Based on the Music Teaching Practice in Middle Schools Course developed the Music Teaching Practice in Middle Schools Course based on Team-based learning (TBL) combined with the peer assessment method. Experts evaluated the Music Teaching Practice in Middle Schools Course based on Team-based learning (TBL) combined with a peer assessment method draft with mean scores for all the items higher than 3.51. Show that the Music Teaching Practice in Middle Schools Course, based on Team-based learning (TBL) combined with the peer assessment method developed in this study at a high level is satisfactory.

Discussion

□ The discussion of studying background information for course development

In the process of curriculum development, an intensive study of the information in the context is crucial. Through a comprehensive analysis of relevant policies, regulations, the current situation, existing problems, and relevant educational theories, we can provide strong support and guidance for the development of the Music Teaching Practice in Middle Schools Course.

The development of higher education courses must have a higher education policy as a guarantee, the Chinese government through higher education policy and related laws and regulations affects the development of Chinese higher education courses and changes, the government through higher education policy for higher education course personnel training target, the arrangement of curriculum system and so on made a series of regulations (Yifan, 2010). These policy directions provide macro guidance and support for the development of the Music Teaching Practice in Middle Schools Course, requiring the curriculum to keep up with the development of The Times and pay attention to practicality and science while encouraging innovation and international exchanges. Music Teaching Practice in Middle Schools Course: As the main course of a music major, it pays attention to cultivating students' teaching skills, educational ideas, and innovative thinking. The curriculum covers the music teaching procedures, teaching process, teaching mode and method, and other key fields, forming a relatively complete curriculum system. At the same time, the course is equipped with relatively perfect teaching facilities and is responsible for by a team of teachers with rich teaching experience. The status quo of the above courses, as an entry point, provides a unique and reasonable development perspective for curriculum development. When obtaining information through interviews, researchers found that the problems in the course objectives were not specific and clear, the course content needed to be supplemented or adjusted, and the teaching strategies to promote students' learning. In the course design, the researchers comprehensively refer to the needs of students, teachers, and the school's background, and carry out targeted development and design (Runqi, 2020). In addition, related theories of curriculum development, such as target model theory, process model theory, and practice model theory, provide different perspectives and ideas for " the development of the Music Teaching Practice in Middle Schools Course. Team-based learning (TBL) related theories, such as constructivism, proximal development zone, and metacognition, provide theoretical support for the teaching strategies and evaluation methods of the course.

□ The discussion of developing the Music Teaching Practice in Middle Schools Course is based on Team-based learning (TBL), combined with the peer assessment method.

As the country "improves aesthetic education teaching, improve students' aesthetic and humanistic quality", the development of university music courses has urgency and necessity, the design of curriculum





standards must conform to the requirements of the national curriculum, around the scientific and systematic, design has high operational curriculum principle, ensure the development and promotion of curriculum (Runqi, 2020). The development of this course strictly follows the five principles of student-centered learning, innovative teaching methods, comprehensive development goals, emphasis on evaluation and feedback, and emphasis on theory and practice. These principles not only reflect the importance attached to the cultivation of practical teaching skills of normal university students but also emphasize the importance of combining theoretical knowledge with practical operation. By providing rich practical opportunities and comprehensive professional guidance, the course aims to help normal university students master a solid foundation of music education and improve their teaching and reflective abilities. The setting of the course objectives is both specific and measurable, which can guide the students' learning direction. At the same time, these goals also fully consider the students' age, cognitive level, and the development of music literacy, which is both challenging and can stimulate the students' learning motivation. Through learning, students can not only master the basic knowledge and teaching skills of the music discipline, but also obtain positive teaching experience in practice, and cultivate correct teacher views and values.

Curriculum content is the process of organizing teaching experience into systems with logical relations, such as units and plans, and promoting the accumulation of learner experience through the reasonable combination of different elements (Chao, 2019). The content of this study has a clear structure and strict logic, covering lesson preparation skills, music teaching demonstration skills, and other aspects, forming a complete knowledge system. These contents are not only close to the actual needs of middle school music teaching but also have a strong operability and practicability. The teaching process takes the TBL team learning mode as the core, and through heterogeneous grouping, preview, personal test, team cooperation exploration, learning achievement display, and teaching evaluation, realizes the full interaction and cooperation between teachers and students, and between students and students. This teaching model not only improves students' learning enthusiasm and participation but also includes team performance in the evaluation system, and the output from the team will be evaluated, rewarded, and challenged by peers from other teams, promoting the development of team assistance ability (Yanyan, 2023). In the teaching process, teachers pay attention to guiding students to think and explore actively, and encourage innovative thinking and personalized development.

The course selects high-quality textbooks and a bibliography as teaching materials. These materials are not only rich in content and diverse in form but also closely related to the course content, which can meet the needs of teaching activities. The authority of teaching materials has also been fully guaranteed, providing a reliable guarantee for students' learning. Curriculum evaluation is an indispensable part of curriculum construction. Through the effective development of curriculum evaluation, both teachers and students can have a systematic understanding of the situation of curriculum teaching (Dandan, 2022). The course evaluation of this study adopts a combination of process evaluation and outcome evaluation, which focuses on both the students' learning process and learning outcomes. Through the classroom demonstration, stage test, final assessment, and other evaluation methods, a comprehensive understanding of the students' learning situation is achieved. This evaluation method not only reflects the learning effect of students objectively and fairly, but also follows the principle of student-centered learning, and provides students with timely feedback and suggestions for improvement.

Recommendations

According to the actual needs and development trend of music teaching in middle schools, it is suggested to dynamically adjust and optimize the course content. By streamlining the non-core content, highlighting the key and difficult points of teaching, introducing the latest research results, and teaching cases, to ensure that the course content can keep up with the pace of the era and meet the learning needs of students.

The teaching mode of this course is compared with similar music education courses in other countries, and the differences and commonalities of educational concepts and teaching methods under different cultural backgrounds are analyzed. This will help to absorb the international advanced experience, optimize the local curriculum design, and improve the level of international teaching.

To ensure the successful implementation of team-based learning combined with the peer assessment method, teachers should be trained to be familiar with these teaching strategies. School districts and educational institutions should provide resources and support for teachers to develop their skills in these fields.





Integrate modern information technology, enhance the interactivity and personalization of courses, explore VR/AR technology, and create an immersive learning experience. Strengthen cooperation with other disciplines, expand the depth and breadth of courses, realize resource sharing, and enhance the quality and influence of courses.

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