

# Application and Exploration of Microlecture in Piano Collective Teaching of Preschool Education Major\*

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**Abstract**—With the popularization of information software such as Weibo, WeChat and micro-video, knowledge learning has also entered a micro era. Microlecture meets this fragmented and individualized learning need and is the product of college teaching reform. This article takes piano collective teaching of preschool education major as research object, elaborates the concept and characteristics of microlecture, analyzes the current situation of preschool piano collective teaching, clarifies the advantages of applying microlecture in piano collective teaching of preschool education major, discusses the misunderstandings of microlecture, puts forward the practical methods of using microlecture teaching, and finally summarizes the shortcomings of applying microlecture in piano collective teaching and puts forward suggestions. The purpose of the research is to speed up the use of microlecture in piano collective teaching, cultivate students' autonomous learning ability, problem-finding ability and problem-solving ability, and improve the effect of preschool piano teaching.

**Keywords:** *microlecture, piano collective teaching, teaching reform*

## I. INTRODUCTION

The 21st century is an era of knowledge and information. With the popularization of Weibo, Wechat, micro-video and other information software, knowledge learning has entered a micro era. Great changes have taken place in people's access to knowledge, types of learning resources, and teaching methods of teachers and learning methods of students. Microlecture meets the needs of fragmented and personalized learning. Since 2010, they have been gradually concerned by educators. They have been applied in mobile learning and online learning and achieved good teaching results.

## II. THE CONCEPT AND CHARACTERISTICS OF MICROLECTURE

Microlecture, also known as micro-lecture, is a new type of online video course designed and developed for a certain subject knowledge point or teaching link by taking micro-teaching video as the main carrier. Microlecture is a kind of

small course relative to regular class, which is used to teach a single knowledge point or to break through a certain teaching problem. Students can preview, review, etc. through microlecture to achieve independent learning. Microlecture supports a variety of new teaching modes, such as flipped classroom and hybrid teaching.

There are many versions of the definition of microlecture. In terms of induction and arrangement, they are short and concise, and short in time. Also, they can be learned and repeated at any time, which were soon favored by the majority of teachers. Microlecture has the following characteristics:

First, the teaching time of microlecture is short. The general teaching time of microlecture video used in colleges and universities is 8-15 minutes, and the teaching time is within 15 minutes, which is more in line with the visual law and cognitive characteristics of college students, and ensures the students' concentration and easy learning.

Second, the content of microlecture is few. The teaching content of microlecture generally includes 1-2 knowledge points, which should be specific and targeted. The teaching content should be designed according to the basis and needs of students, which can be the key and difficult point of teaching, or the weak point of students, etc.

Third, microlecture learning is not limited by time and place. Microlecture teaching is mainly used for students' preview and review after class, not for teachers' classroom teaching. It can make students learn at any time and repeatedly, which greatly shortens the gap of students' acceptance ability in class, and makes teaching and learning more efficient.

Fourth, there are rich audio-visual changes in microlecture teaching. Microlecture production consists of short teaching video, PPT, picture and text. Compared with the traditional classroom teaching, students' audio-visual impact is strong, which meets the diverse learning needs of students. Students are more willing to accept and make learning more active.

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### III. THE ADVANTAGES OF APPLYING MICROLECTURE TO PIANO COLLECTIVE TEACHING OF PRESCHOOL EDUCATION MAJOR

#### A. *Microlecture teaching is an inevitable outcome of teaching reform in colleges and universities*

The goal of teaching reform in colleges and universities is to build a "student-centered" classroom. At present, the current situation of piano teaching in preschool education specialty is as the following: it mainly adopts collective teaching mode, and uses digital piano. There are about 20 students in each class, and teaching method is mainly the method of lecture. It is a classroom centered on teachers' teaching. The reason why the teaching method is backward is that it allows students to "listen" passively, and the students listen to what the teacher says. Students have no chance to express their own ideas. This kind of classroom in which teachers teach actively and students learn passively will result in less interaction between teachers and students. The class hour is 2 hours. One class is for teachers to teach new lessons, and the other one is for the students to review the last class. In the process, the teachers repeatedly explain, and the students who do not need review the class can practice the piano freely. The precious classroom time is not fully utilized, and the advantages of piano collective teaching are not exerted. This is obviously not in line with the requirements of teaching reform in colleges and universities. Microlecture enables students to learn ahead of time and actively. Teachers and students discuss the key and difficult points in the classroom, review and consolidate the knowledge after class, and build a student-centered classroom.

#### B. *Microlecture teaching alleviates the gap in students' uneven level*

Most of the students majoring in pre-school education have zero foundation for the piano. Due to the factors of living background, personal quality and acceptance ability, there is a gap among the levels of the students soon after entering the school, which brings difficulties to teachers and affects the teaching progress. In Bloom's opinion, the main difference between "academically and morally poor students" and other students is that they spend more time learning the same content. As long as the time is enough and supported by learning materials and methods suitable for them, 95% of the students can master the scientific and cultural knowledge specified in the teaching materials and achieve excellent results.<sup>1</sup>The application of microlecture can alleviate the situation of students' uneven level. Students who learn slowly or have difficulties can learn repeatedly and learn more times. Giving students enough time and space also reflects the teaching principle of respecting individual differences. The prepared classroom is full of vitality and the interaction between teachers and students is active.

<sup>1</sup> Hu Shiqing, Wen Chunlong. Status and Trend Analysis of Micro-Class Research in China. [J]. China Educational Technology. 2016. 3. P49.

#### C. *Microlecture teaching improves teaching effect*

The adoption of piano collective teaching for students majoring in preschool education is based on the requirements of training objectives and a large number of students. There is no doubt that piano collective teaching is suitable for students majoring in preschool education. But for a long time, the teacher-centered teaching mode often ignores the students' prior knowledge. If the students do not have certain prior knowledge before class, even if they have the highest learning motivation, they can't fully understand the new music, nor have the ability to think, resulting in the unsatisfactory teaching effect. The use of microlecture can effectively improve this point. After learning microlecture before class, students have a certain grasp of new music, have a certain amount of prior knowledge, and can complete singing, single-hand playing, group ensemble and other exercises in the classroom, and can complete classroom interaction such as teacher-student discussion, students' questions, teachers' questions, etc., which shortens the time of music learning and improves the teaching effect.

#### D. *Improving the ability of students to learn independently, find and solve problems*

The traditional teaching method has high efficiency in the memory and understanding of knowledge, but it has not been effectively realized in the analysis, evaluation and creation of knowledge. As a result, students lack the ability of autonomous learning, problem finding and problem solving. The use of microlecture in piano teaching improves students' abilities in these three aspects. From the pre-class preview, the students have completed their own learning. The links of classroom questioning and answering have cultivated the students' ability to find problems, put forward the difficulties and doubts of pre-class learning, and the classroom discussion links have cultivated the students' ability to solve problems. The use of microlecture in piano collective teaching makes students and teachers exchange roles. Students become the master of the class, and teachers are responsible for effective guidance, question answering and summary.

### IV. APPLICATION OF MICROLECTURE IN PIANO COLLECTIVE TEACHING OF PRESCHOOL EDUCATION MAJOR

#### A. *Several misunderstandings on applying microlecture in piano collective teaching*

According to the CNKI, there is not much literature on the application of microlecture in piano collective teaching, which indicates that the application of microlectures in piano collective teaching is not widespread, causing many piano teachers to be ignorant of the application of microlecture, and there are some misunderstandings.

Misunderstanding 1: microlecture is used for classroom teaching, teachers can talk less or not. This is caused by the unclear role of the teacher in the classroom after using microlecture. Microlecture is used for self-study of students before class. Students should complete pre-class study according to their own abilities, but it does not mean that

teachers do not teach in class. Due to the differences in ability and understanding, students' autonomous learning may have insufficient depth of understanding or cognitive deviation. Therefore, teachers should design teaching activities to pre-check students' prior knowledge in the classroom. In the classroom, teachers' roles are organizers, facilitators, and helpers. Teachers should purposefully organize in-depth teaching activities, guide students to interact with each other, find problems and solve problems in the exchange activities. The teacher is the key to any teaching reform. After the use of microlecture teaching, teachers are not optional, but become more important in piano collective teaching.

Misunderstanding 2: teachers needn't prepare lessons or less. It is believed that with the microlecture video teaching materials, the amount of teachers' lesson preparation will be reduced, which is caused by the lack of understanding of the classroom model of microlecture teaching. Microlecture supports flipped classroom, hybrid teaching and other innovative teaching modes. The key point of this teaching mode is to guide, inspire and answer students' questions, not just the basic knowledge of textbooks and the way of playing music. This requires teachers to have sufficient preparation for lessons, sufficient knowledge reserve, and be able to think of any difficulties students may encounter in playing and any problems that can be raised. The preparation for lessons is more and more extensive than the traditional classroom, and the requirements for teachers are higher. There is also a suggestion. When conditions permit, teachers are better at recording microlecture by themselves, which is more suitable for students' level than using ready-made microlecture videos. Especially for students majoring in preschool education whose piano foundation is weak, recording microlecture video by themselves is more targeted, and the teaching effect is better, so that teachers' lesson preparation volume is larger.

#### *B. Teaching design of piano microlecture of preschool education major*

The teaching design of preschool piano microlecture should follow the teaching principle and the students' characteristic cognition. A good microlecture is directly related to the quality of class, teaching effect and the development of students' ability. In this paper, the author divides three kinds of piano micro lessons in common use according to the principle of teaching method and the purpose of students' learning needs.

1) *Lecture*: The advantage of method of lecture is that it can effectively and intensively impart knowledge. Although there are some disadvantages and limitations in traditional classroom teaching, it is very suitable for explaining common sense of music theory, musical structure, technical difficulties, and anecdotes of famous people. The purpose is to let students learn the knowledge in advance before class, which not only develops students' independent learning ability, but also enables students to have a certain amount of previous knowledge.

2) *Practice*: It is suitable for students to complete certain actions or activities repeatedly under the guidance of teachers, relying on self-conscious control and correction, so as to form skills or behavior habits, especially suitable for tool subjects and skill subjects.<sup>2</sup> Because most of the students majoring in preschool education have zero foundation for piano, the correctness of after-school practice is very important. This kind of microlecture is mainly to help students practice after class, reduce mistakes and avoid detours. The content can be music reading and singing, slow demonstration playing with one hand, technical demonstration and explanation, or slow demonstration with both hands. The purpose is to improve the accuracy of the exercises by allowing students to sing and play along with the video.

3) *Performance*: The teaching method based on appreciation activities is used to complete the demonstration music of teachers or students in teaching, so as to achieve the purpose of learning, communication, improving aesthetics and stimulating learning interest. Performance video should restore the original speed of music as much as possible, and strive for perfection in music performance, style grasp and technical completion, so as to provide a high standard direction and goal for students to learn music.

The choice of piano microlecture teaching method can be one or the combination of several methods. For example, to learn the music "Song of Selling Newspapers", teachers can use the method of lecture to tell the author's introduction, creation background, music style, etc., and then use the performance method to demonstrate the performance of the whole music. Finally, teachers can use the inquiry method to leave 1-2 questions for students to think about.

#### *C. Design of teaching content for piano microlecture of preschool education major*

1) *The teaching content should conform to the cognitive characteristics of students*: The design of the teaching content of the piano microlecture of preschool education majors still needs to follow the "student-centered" classroom, understand the students' ideas and conduct teaching according to the students' cognitive level. In addition to the weak piano foundation, it is necessary to design teaching content according to the learning difficulties and doubts. Otherwise, it will become another form of traditional classroom, losing the significance of using microlecture teaching.

2) *Teaching content should be interdisciplinary*: The teaching content of piano microlecture should be designed in line with the concept of interdisciplinary integration, which can integrate music theory, musical form, music history, history, literature and other aspects, and more in

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<sup>2</sup> Bloom. *Masters Learning*. [M]. Fujian: Fujian People's Publishing House, 1986.

line with the knowledge demand and talent training objectives of college students.

The production of microlecture can be composed of video, courseware, PPT and pictures. The voice, image and background color in microlecture should be as soft and simple as possible to avoid disturbing stimulation to students.

#### V. THE DEFICIENCY AND PROSPECT OF APPLYING MICROLECTURE TO PIANO COLLECTIVE TEACHING

Since the first study on microlecture was published in 2011, microlecture has attracted the attention of many educational institutions and teachers, and has been gradually applied to various disciplines by front-line teachers. However, there are still some deficiencies in the application of microlecture in piano collective teaching.

First of all, theoretical research is insufficient. According to CNKI, there are not many theoretical researches on microlecture teaching in piano collective teaching, which also means that the practical application is not enough.

Secondly, the evaluation mechanism needs to be improved. Any kind of teaching reform means the change of teaching evaluation, the purpose and standard of student evaluation have changed, and the way of teaching will also change.

Finally, it is required to improve the ability of teachers to record microlecture. With the popularization of microlecture, various free microlecture and MOOC platforms have been launched one after another, but there are not many microlecture videos for piano collective teaching. Because of different teaching materials, the use of microlecture videos is not suitable, so it is urgent to improve the ability of teachers to make their own piano microlecture.

#### VI. CONCLUSION

Today's society has entered the Internet era, and information network technology is advancing with each passing day, and information technology is accelerating into the field of education. To fully improve the teaching quality of piano collective teaching, it is necessary to make full use of the advantages of information network technology to explore a new teaching model of "Internet + education". Only in this way can higher education be completely improved in terms of talent training and teaching quality.

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