

Research on Modern dance Teaching Mode Based on PBL Theory

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Abstract. The PBL theory advocates that students can deal with problems in cooperation, learn relevant knowledge and skills, and enhance their autonomous learning ability by creating real problem situations. This research applies the PBL teaching mode to the teaching of modern dance elective courses and explores the feasibility and effectiveness of the PBL teaching mode in the teaching practice of modern dance elective courses. Through the comparison of the experimental results, this paper analyzes the application effect of PBL teaching mode in the practice of modern dance elective courses in colleges and universities and provides a new theoretical basis and practical experience for the teaching reform of modern dance elective courses. Through the comparison of the experimental results, this paper analyzes the application effect of PBL teaching mode in the practice of modern dance elective courses in colleges and universities and provides a new theoretical basis and practical experience for the teaching reform of modern dance elective courses.

Keywords: PBL theory; Modern dance; Teaching model.

1. Introduction

Traditional dance education usually adopts the teaching mode of teacher guidance, demonstration, and student imitation, which does not consider what kind of dance students are suitable for, how to choose the type of dance, and other issues, leading to poor overall teaching effect of dance education. The PBL theory has innovated the idea of modern dance education and can effectively improve the teaching effect and level of dance [1].

PBL theory (Problem Based Learning) refers to problem-based Learning, which enables students to deal with problems in cooperation, learn relevant knowledge and skills, and enhance their independent learning ability by creating real problem situations. The fundamental goal of applying PBL theory to the teaching process is to solve the problems existing in the learning process, put students in the situation of real problems, solve problems effectively through group cooperation or independent exploration, effectively improve students' ability to find, analyze and solve problems, and stimulate their learning enthusiasm and interest [2].

The integration of PBL theory into dance education can clarify the leading position of students in the learning process [3], further, stimulate students' potential and creativity, and enable students to participate in dance courses more actively and independently, which is an inevitable demand for the development of current education [4]. Practicality is the most significant feature of dance education. Dance teachers need not only to explain theoretical knowledge to students in the classroom teaching process but also to ensure the output of practice and give students full opportunities to practice[5].

2. PBL application, advantages of modern dance teaching mode

The open teaching mode based on PBL theory can create a relaxed and pleasant teaching atmosphere for students so that students can firmly master dance knowledge and skills in a good teaching situation [6], which is of great significance to the exercise and improvement of students' abilities in all aspects and is conducive to the cultivation of students' ability to learn dance all their life. The open teaching mode based on PBL theory mainly includes four teaching stages: perception, understanding, consolidation, and application [7]. By integrating it into the dance education

curriculum, students can fully grasp the initiative of dance learning, and provide a good environment for discussion and cooperative learning, so as to ensure that students can fully grasp dance knowledge and improve the learning effect [8]. The PBL teaching mode is obviously superior to the traditional teaching mode, which takes students as the center of designing teaching activities. Before the implementation of teaching activities, dance teachers must clarify the key teaching problems, understand the knowledge points involved in the process of dealing with problems and the ultimate purpose, comprehensively analyze the students' learning ability, the difficulty of problems, and other factors from the overall perspective, and carry out targeted and effective dance teaching. In modern dance teaching, students should also closely follow the guidance of teachers, exert their imagination and imagination, analyze and think about problems independently, and constantly explore solutions to problems so as to truly improve the efficiency of dance education [9].

3. Literature review

PBL (Problem based Learning) is often translated as "problem-based learning" and "problem-oriented learning method," and it is also a teaching mode that our country has paid more attention to in recent years. PBL teaching mode is a method of Learning and constructing knowledge. Under the guidance of teachers, students deal with problems through group discussions. The key to the PBL teaching mode is to ask questions. Setting fascinating topics can attract students to actively participate in the discussion of problems and get appropriate feedback and help from teachers so as to obtain new knowledge[10]. PBL teaching mode is a teaching mode that takes students as the main body and teachers as the leading role. Through this teaching mode, not only knowledge but also learning methods can be obtained, which is consistent with the concept of "lifelong learning" advocated by today's society. To sum up, the PBL teaching mode is a teaching mode that takes teachers as the leading role, students as the main body, take problems as the starting point of Learning, and takes cultivating students' autonomous learning ability and comprehensive exploration ability as the teaching goal. Teachers use situational teaching to let students complete the knowledge construction of teaching content in the process of constantly raising and solving problems.

4. Practice teaching design of preschool dance course based on PBL theory

4.1 Teaching content design

4.1.1 Primary stage

The practical teaching content in the primary stage is mainly basic training, and the repetition rate of teaching content is high. Therefore, dance teachers should enrich teaching methods as much as possible to enable students to obtain a sense of achievement so as to maximize their enthusiasm of students. With the help of information technology, dance teachers can give full play to the advantages of "Internet plus," arrange some questions before class, let students watch online dance courses with questions, learn basic dance knowledge, carry out dance training, and fully exercise students' dance aesthetic ability. As students are distracted, dance teachers need to reasonably adjust dance teaching content, enrich teaching means and methods, present dance knowledge with pictures, videos, etc., mobilize students' visual, auditory, and other sensory abilities, stimulate their interest in learning, guide them to gradually master dance skills, explore dance rules, and improve dance thinking in the process of repeated imitation and training. Dance teachers should further extend classroom teaching, make students contact more dance elements, cultivate dance awareness, and form a good habit of active learning. In the process of carrying out preschool dance education courses, dance teachers can intersperse corresponding dance movements according to the personality characteristics of students, select music with clear and light rhythm as far as possible, and combine basic editing rules to create dance movements suitable for students, so that students can be fully trained. Before teaching dance courses, teachers can let students understand different body parts according to the physical development of students of different ages, design training programs for flexible, stretching, relaxation,

and other body parts, and select and create dance movements according to the rhythm that students use more frequently in dance, such as 2/4, 3/4, 4/4, etc., to fully release the students' nature.

4.1.2 Intermediate stage

There are relatively many kinds of dance in the intermediate stage, so the teaching content needs to be designed reasonably. Teachers can reasonably arrange the types of dance suitable for students' learning into different teaching units, organically integrate the explanation of basic dance knowledge, dance skill teaching, and dance choreography in the classroom, comprehensively train and improve students' dance ability, and cultivate students' good dance awareness. Teachers can let students further choose to learn dance knowledge based on their own actual conditions, such as learning ability and interest points.

4.1.3 Advanced stage

After completing dance teaching at the primary and intermediate stages, dance teachers need to focus on the choreography, reasonably integrate dance knowledge, dance movements, and other contents, collect and sort out dance materials that match the students' age and psychological characteristics, and make students learn and master in a simple, understandable and easy to learn the way. Teachers can refer to excellent students' plays, find the key problems, effectively create problem teaching situations, explain the steps of choreography to students, and penetrate the basic characteristics of students' dance, so that students can learn dance movement style and choreography knowledge at the same time, and actively carry out dance choreography practice training activities. In the process of choreography, teachers can actively introduce the form of rhythm, combine the actual teaching activities in the student park, integrate life elements into dance, and improve students' enthusiasm for learning and exercise. At the same time, in order to make the focus of preschool dance classroom teaching more prominent, teachers can reasonably use the form of singing and dancing performances to create a good classroom atmosphere and use dance games to enable students to firmly grasp dance knowledge and actions, so that the classroom teaching content is more scientific and reasonable, and improve the teaching effect.

4.2 Design of teaching activities

4.2.1 Before class

In order to achieve a good preschool modern dance teaching effect, teachers need to do a good job in designing teaching activities, especially in preparing for dance courses. In combination with the dance teaching content, we can first set some simple questions to stimulate students' thinking, guide students into the state of dance learning, and then design some dance activities around these problems to ensure the realization of the teaching objectives of the dance course. As the preschool dance course is relatively simple, teachers should combine the characteristics of the dance course, take students as the center, and pre-decompose and practice the relevant dance movements so as to explain the action essentials to students and facilitate students' learning and mastering. In addition, teachers should also specify the specific types of dance they teach so that students can focus on dance practice and improve the teaching quality of dance courses.

4.2.2 In class

In the actual teaching process, teachers should make timely and effective interactions with students to solve and deal with the problems involved after making preparations before class. Teachers can divide students into different groups to complete the learning tasks in groups, train students' ability of unity and cooperation, and present the best dance performance. Then the teacher can evaluate the students' dance works so that the students can make continuous progress, learn from each other and make common progress in-group cooperation. In the process of teaching new dance to students, teachers should teach students how to arrange formation and master dance skills in continuous practice. In the process of practical teaching, modern dance teachers need to conduct simulation

teaching, accumulate teaching experience in the evaluation process, optimize and adjust teaching ideas and teaching methods, and lay the foundation for better dance teaching.

4.2.3 After class

After completing the teaching task of the course, the teacher should timely summarize the classroom teaching results, encourage and supervise students to practice, and design the teaching plan for the next modern dance course based on the actual feedback of students.

5. Assessment methods for practical teaching courses

5.1 Evaluation design

In a sense, teaching evaluation is the presentation of students' performance in the learning process and an indispensable part of the teaching process. It serves the continuous construction of students' knowledge reserves and promotes the effective progress of students' learning. Evaluation should not be limited to results but also pay attention to the evaluation of students' knowledge construction process. In order to carry out the PBL teaching model in modern dance elective course teaching in a healthy way, with efficient testing and effective evaluation, this study, based on different classification standards, divides the evaluation type of the PBL teaching model into evaluation objects, evaluation contents, evaluation methods, evaluation stages, and evaluation functions, with a multi-angle and multi-aspect evaluation method that pays equal attention to the development of knowledge and ability. This is not only a practical judgment of students' classroom learning, but also a comprehensive evaluation of students' finding and solving problems, data collection, and practical exploration, on the whole, aiming to improve students' subjective participation and knowledge mastery in the classroom, promote teaching and enhance the interaction between teachers and students., see Table 1.

Table 1. Classification of PBL Teaching Mode Evaluation

Classification standard	type composition
Evaluation object	students, groups, and teachers
Evaluation content	Skill evaluation, emotion evaluation, attitude evaluation, ability evaluation, knowledge evaluation
Evaluation method	Online evaluation and offline evaluation
Evaluation stage	pre-class evaluation, in-class evaluation, and after-class evaluation
Formative evaluation	summative evaluation, and diagnostic evaluation

5.2 Evaluation criteria for PBL teaching mode

The evaluation standard is one of the factors that determine whether the teaching evaluation design is reasonable. When formulating the evaluation standard, the individual differences of students need to be taken into account. The composition of the evaluation standard should conform to the teaching objectives and the student's learning situation. The evaluation standard of PBL teaching mode in this study consists of three parts: classroom learning, homework before and after class, and skill testing, and each part account for a corresponding percentage. Classroom learning evaluation is composed of teacher evaluation, group mutual evaluation, and student self-evaluation, which also attaches great importance to humanistic evaluation. Teachers and students, as evaluation subjects, jointly participate in various evaluations, which can well reflect the actual situation of students' classroom learning and skill mastery, and finally form a comprehensive evaluation. See the following table for details: see Table 2.

Table 2. PBL Teaching Mode Scoring Standard

Evaluation composition	Scoring requirements
Classroom learning (40%)	In order to better evaluate classroom learning, the evaluation object of each class should fill in the evaluation form
Homework before and after class (20%)	There are nine pre-class assignments and nine post-class assignments in the teaching course except for the 13th, 14th, and 15th weeks. The homework before class is mainly video preview and searching for relevant information about questions. The teacher gives a score according to the correct degree of the presentation and questions in class. The homework after class is mainly a technical action exercise, and the teacher will score according to the degree of completion and quality of technical action.
Skill test (40%)	Skill test: It consists of two parts: the required single-person combination and the group self-compiled combination. The scoring standard is mainly the skill examination evaluation standard in the teaching syllabus of Yangzhou University's public modern dance elective course.

5.3 Problem scenario design

Before class, the teacher sent the video of this lesson to the WeChat group and announced the pre-class preview questions: (1) Carefully observe the two videos, and pay attention to what formation changes are used in the videos. (2) How to make the combination beautiful? All teams are required to collect data in advance through the WeChat official account or Tiktok-related platforms according to the problems to be solved in this class. In the class, the teacher first explains the arrangement and combination materials and then explains the learning problems of this class: (1) What should be paid attention to in the arrangement and combination? (2) How to keep the team in order when changing the formation? After the teacher prompted the matters needing attention, he announced that each group would prepare its own link. In the first half of the class, each group cooperated with each other according to the questions. In the second half of the class, the teacher would play music circularly, and each group would carry out complete action exercises with the music.

5.4 Learning requirements

- (1) Each group shall collect and sort out the data according to the problems before the class, and the group shall cooperate to explore and solve the problems during the class
- (2) In the group cooperation link, teachers will patrol and help, and the group can take the initiative to communicate with teachers to solve problems that cannot be solved.
- (3) Before the end of this lesson, the learning achievements will be reported in the form of a group presentation or competition.
- (4) Evaluate the learning of yourself, team members, and other team presentations.

6. Research Results and Analysis

6.1 Test results and analysis before the experiment

In order to ensure that there was no significant difference in physical fitness between the two groups of students before the experiment, before the experiment, the two groups of students were tested on the results of three physical fitness tests; namely, 50-meter running, one minute rope skipping and sitting forward bending. The results are as follows: see Table 3.

It can be seen from Table 3 that the paired sample T-test was used to compare the scores of the five dimensions of sports learning interest of the students in the experimental group before and after the experiment. After the experiment, the students in the experimental group significantly improved in the scores of sports learning interest in terms of passivity, enthusiasm, participation, autonomy, and sports attention, with a very significant difference ($P < 0.01$), see Table 4.

Table 3. Comparison results of physical fitness between the experimental group and the control group before the experiment (N=59)

Dimension	Before test	After experiment	T value	P value
Negative	19.42±6.90	16.84±5.49	2.575	0.000
Enthusiasm	18.97±3.73	21.60±4.89	-3.651	0.000
Participation	16.52±3.49	18.77±3.26	-2.542	0.000
Autonomy	16.16±5.78	19.55±4.32	-3.398	0.000
Dance attention	17.18±5.32	18.95±4.25	-3.160	0.000

Note: P<0.05 means a significant difference, P<0.01 means a very significant difference

6.2 Results and analysis of learning achievements of the Chaqiaqia dance technique after the experiment

Table 4. Comparison results of square dance steps between the experimental group and the control group after the test (N=59)

Dimension	Before test	After experiment	T value	P value
Action standard	83.28.42±6.03	81.05±4.50	2.247	0.042
Music rhythm	83.39±2.04	82.80±1.77	0.448	0.781
Expressiveness	81.25±6.08	78.03±5.34	2.061	0.0021

Note: P<0.05 means a significant difference, P<0.01 means a very significant difference

According to Table 4, the independent sample T-test was used to compare the scores of the two groups of students in the square step of the Chacha dance after the experiment. After the experiment, the scores of the experimental group were significantly higher than those of the control group in terms of movement standard and expressiveness (P<0.05), and there was no significant difference between the two groups in terms of the score of musical rhythm sense (P>0.05).

7. Conclusion

As an important part of education, dance courses play an important role in the development of student's physical and mental health. In the construction of a dance education curriculum, the establishment of a dance teaching mode based on PBL theory can effectively improve the teaching quality and improve teaching level. In the construction of a dance education curriculum based on PBL theory, the basic goal and core issues of dance education curriculum training should be clarified, and dance curriculum practice teaching should be carried out from three aspects of teaching content, teaching mode, and curriculum assessment to effectively achieve the teaching goal of dance curriculum.

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