Application Of Flipped Classroom Teaching Mode In Dance Teaching Of Secondary School

Wei Huang

Art School Affiliated To Yunnan Art University, Kunming, Yunnan 650031, China

Abstract: With the rapid development of modern information technology, dance education in secondary schools also needs to follow the development trend of the Times and carry out reform and innovation. Flipped classroom teaching mode is one of the popular new teaching modes, which makes up for the deficiencies of traditional teaching mode and promotes the improvement of teaching level and educational efficiency. Based on this, this paper mainly discusses the application of flipped classroom teaching mode in dance teaching of secondary school.

Keywords: Flipped Classroom; Technical Secondary School; Dance Teaching.

1. INTRODUCTION

Under the background of the current continuous updating and progress of science and technology and the continuous promotion of teaching reform in technical secondary schools, the traditional subject teaching mode adopted by technical secondary schools in the past has been unable to meet the teaching needs of the new era, and technical secondary education is in urgent need of changing to the direction of informatization, networking and digitalization [1]. The flipped classroom teaching mode is a teaching mode formed by relying on modern information technology, which is applied to dance teaching in secondary school, subverts the relationship between teachers and students in traditional teaching, stimulates students’ learning autonomy, and helps improve the quality of dance teaching in secondary school. In recent years, the rapid development of science and technology has promoted the wide application in teaching. The information-based teaching method also causes teachers to be more casual in the practical application, so it is easy to cause problems such as difficulty in the selection of teaching materials and distraction of students' attention [1]. In English, information-based educational applications are common [2].

English information teaching based on differential evolution algorithm has been studied by many experts. DorAE describes a multi-objective differential evolution (MODE) algorithm for measuring analog circuits using load distance. MODE is used to calculate the Pareto side of two object optimization problems, namely increasing the cutting frequency and reducing the investment of the current second-generation manufacturers. To demonstrate the capabilities of MODE, it is compared with a non-sequential genetic algorithm (NSGA-II). These comparisons show that MODE outperforms NSGA-II in terms of optimal solution quality, variability of these solutions before Pareto, and computation time [3]. MutiluMM treats transmission risk as a travel factor and risk reduction as a channel frequency correction issue. A two-stage optimization model was developed to reduce the overall risk of terminal infection and increase the overall risk of infection. Differential evolution algorithms are used to solve NP-hard-layered traffic network design problems. The new airport service is proposed for a higher-level model that considers pollution risks in terms of vehicle flow at public transport stops. Traffic movement is determined using a traffic distribution model that balances user constraints. This model is suitable for small legend network and medium test network [4]. CardenasJ proposes a new method strategy based on the use of emerging technologies for meaningful learning as a primary instruction for visually impaired students. Therefore, a good practice roadmap using this approach will allow the establishment of a clear process to achieve active, meaningful and autonomous participation of students using a minimum of time [5]. The advancement based on information technology means such as computers and multimedia networks not only promotes the modernization and information-based process of education, but also greatly improves the level.

Aiming at the practical problem that colleges and universities urgently need to cultivate applied talents who adapt to the development of the information age, this paper starts from the characteristics of undergraduate college students, collects, organizes and reads relevant literature materials, combines relevant theoretical knowledge, and conducts a survey method. Analyze the effect of English information teaching based on differential evolution algorithm, and form an effective English classroom teaching method that is conducive to improving the teaching quality. In the context of the transformation of colleges and universities, my country attaches great importance to
the development of undergraduate colleges, especially in the improvement of their comprehensive foreign language application ability, which has a wide range of theoretical and practical significance.

The popularity of 5G technology has inserted the wings of mobile internet into hybrid teaching, and the epidemic situation at home has provided a hotbed for the acceptance and growth of flip classroom between teachers and students. In the post-epidemic period, in the face of traditional education, turning over and mixing seems to be shelved. Only returning to the original care of knowledge and education is the best way out.

Face-to-face classroom teaching with teacher's explanation as the main part can arouse students' interest in 1-2 classes, but can't guarantee their interest in 18 weeks, can arouse the interest of 1/3 students, but can't guarantee the participation of all students. Mobile Internet has already made the undergraduate students familiar with the stream of words, pictures, music and videos overwhelmingly every day.

The classroom that still uses "PPT+ audio and video+teacher's explanation" must only keep the students' short-term enthusiasm and interest burning out of respect for knowledge and teachers. How to make students deeply integrate into the course study for a long time is a problem that every university teacher wants to solve. Naturally, this needs a complete set of ecological solutions based on the 18-week teaching arrangement, the core of which is students' participation, so as to make them understanding through achieving their eyes, ears, brains, even hearts.

According to "Dale's Cone of Experience"(Heidi, 2020; Dale, 1969) in Figure 1, when teachers use "animation+video+lecture" to carry out teaching, the retention rate of students' memories of what they have heard and seen is as high as 50%, which can be said to be a model of outstanding teachers at present, although the preparation of animation+video+lecture notes is time-consuming and labor-intensive.

Figure 1: Dale's Cone of Experience

It is true that every teacher hopes that such vivid teaching can keep all the students interested in 90 minutes of study. However, the teacher's inner pursuit often encounters the embarrassment of losing interest in the middle. The reason is very simple. It's like a 90-minute film production that continues to attract audiences without urine point, except that the teacher doesn't have the sound, light and electricity resources for film production, and the whole production team only has the teacher.
2. THE SHORTCOMINGS OF DANCE TEACHING IN TECHNICAL SECONDARY SCHOOLS

The differential evolution (DE) algorithm is an emerging evolutionary computing technology. The algorithm was originally used to solve the Chebyshev polynomial fitting problem. Since this problem is a real number optimization problem, the real number coding is used to directly represent the individual. The vector difference is used to perturb the vector population, so the core operation of the algorithm is the mutation operation. Then the differential evolution algorithm gradually became an effective algorithm for solving complex optimization problems. The search process of differential evolution algorithm is generated by mutual cooperation and competition among individuals in the group, and it is an algorithm based on group intelligence optimization [6-7]. The coding method used is real number coding, which performs global search and reduces the complexity of the operation. Differential evolution algorithm has strong global cohesion potential and optimal ability. Also, differential evolution algorithms are very general and suitable for solving complex growth problems. As an efficient parallel random search algorithm, differential evolution algorithm has become a hot research topic in computational intelligence and related neighborhoods. At present, differential evolution algorithms have been widely used in a series of fields such as neural networks, power systems, and control engineering [8-9]. From the perspective of "Internet+education", this paper constructs the activation path of offline flip - mix first - class undergraduate courses, and conducts empirical measurement research on the improvement of learning achievement quality by using five dimensions, such as cognitive presence, learning participation, self - efficacy, group strength and teacher - student interaction, and obtains the activation path of offline - flip - mix+offline - experience - mix+progressive - multi - evaluation, which is beneficial to solve the "embarrassment of losing interest in the middle of vivid teaching". Taking all students as the center, students can generate knowledge and skills in accepting participation, generate values and ideas in experiencing participation, and return to the original care of knowledge and education.

![Figure 1](image.png)

**Figure 1:** Comparison between experimental group and control group

### 2.1 Single teaching means

In traditional dance teaching of technical secondary schools, classroom teaching is still dominated by teachers, who explain dance movements to students and demonstrate them personally, and students imitate them. However, from a practical point of view, the number of dance teachers in technical secondary schools is relatively small while the number of students is large, so teachers need to repeatedly explain and demonstrate a certain movement in the teaching process, which leads to students' inadequate understanding of some movements and increases the teaching burden of teachers, and ultimately affects the efficiency of dance classroom teaching [2]. At the same time, because some dance movements are more complex, it is difficult for students to understand the essentials of movements, increasing the difficulty of dance learning, and losing interest in dance learning over time. Teacher-student relationship plays a very important role in teaching. It is not only the basic condition for the successful completion of teaching activities, but also the vivid embodiment of teachers and students’ emotion,
value and meaning in teaching and teaching activities. For a long time, in addition to imparting knowledge, teachers also need to have emotional input in teaching. These emotional factors will enable students to acquire emotional cognition and emotional experience, so that students' feelings about teachers can be transferred to classrooms and courses. The teacher-student relationship will continue from the classroom to the extracurricular, and even a lifetime. The so-called "teacher for one day, father for life", a good teacher-student relationship has a lasting positive impact on both students and teachers.

2.2 Lack of professional teachers

As for the dance teaching in technical secondary schools, dance teachers' professional dance quality is directly related to the final dance teaching quality, so higher requirements are put forward for dance teachers in technical secondary schools. But at present, most of the dance teachers in the dance teaching of secondary vocational schools are not from the subject class, and there are even some non-dance majors, and the school does not pay attention to teacher training, resulting in the overall level of the teaching staff is insufficient. English teaching emphasizes the process of learning English based on information. It refers to the combination and the application in the process of English learning, so that English teaching keeps pace with the times [10].

Information-based learning is a modern teaching applied to teaching, which is based on information technology. The importance of computer science education is that, first of all, through the development of computer science education, it is possible to innovate traditional English teaching methods, change traditional English classroom teaching methods, and integrate into the study of program concepts. Technology education relies on computer technology to assist English teaching in teaching. Introduce clear visual information into English classrooms, create a flexible learning environment, meet students' needs, expand students' English language ability, and stimulate students' interest in learning English from a new perspective. The second is to use information-based teaching methods to create a realistic learning environment, improve students' preferences and characteristics, improve video materials that meet academic requirements, and promote students' learning in the classroom. Video materials are a great way to show what people in English-speaking countries really think. Improve the learning environment and improve teaching outcomes [11-12]. For example, record students' interests and characteristics, activate videos that meet teaching requirements, and facilitate students to learn in class. Video apps can show the real world. Improve the learning environment and improve teaching outcomes.

<table>
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<th>Table 1: Percentage Distribution of the Respondents</th>
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By comparing the education statistics in 2012 and 2021, it can be found that the number of schools in the compulsory education stage has been reduced, the enrollment and students in school have increased to a certain extent, and the consolidation rate of nine-year compulsory education has increased; the gross enrollment rate in high school has increased by 6.4 %, full-time teachers have increased significantly, and the student-teacher ratio has been further optimized. Through the continuous implementation of the compulsory education consolidation rate and the promotion of the popularization strategy of high school education, the popularization level of basic education in my country has been significantly improved.

3. APPLICATION OF FLIPPED CLASSROOM TEACHING MODE IN DANCE TEACHING OF SECONDARY SCHOOL

Compared with the traditional teaching mode, the flipped classroom teaching mode is more specific, and pre-class preview is the core of the teaching mode. By encouraging students to preview before class and increase the time of dance teaching, the overall teaching quality can be further improved. Modern information technology is becoming more and more mature and the use of multimedia such as computers is becoming more and more popular. English teaching in our country's undergraduate colleges is also developing in line with the times, and information - based teaching represented by information technology means such as computers and multimedia has gradually emerged. The purpose of this paper is to analyze the impact based on differential evolution algorithms and to develop an
effective approach to English language learning, with a focus on improving the quality of education for undergraduate students. By collecting, sorting and reading related journals and publications, using the method of query research, based on the variance evolution algorithm, the differential learning research based on the English algorithm algorithm is carried out for the students of the two optional classes in high school. The survey results show that 63.2% of the respondents believe that learning English based on different evolutionary algorithms may stimulate their interest in writing. In addition, the comparison of the results of classroom experiments and classroom control shows that 95% of the respondents believe that the differential evolution algorithm is applied to English computer science, and English learning with some technologies will be improved.

3.1 Design the pre-class teaching content

For the design of pre-class teaching content, dance teachers are required to prepare corresponding teaching videos of practical lessons, including teaching videos of dance, recording videos of practical lessons, videos of domestic and foreign competitions, etc., and upload these videos to the network platform for students to prepare before class. The content of the video should be short and concise, and the time should be controlled at about five to seven minutes. The teaching content should be highlighted to avoid the distraction of students during the watching process caused by the excessively long video, so as to ensure the optimal learning effect [3]. At the same time, dance teachers should use terms that are easy for students to understand to explain key and difficult knowledge, put forward targeted questions for students, and guide students to think about questions after watching the video. During the class, the dance teacher collects the problems that students encounter in the process of watching the video, and adjusts the teaching key content according to the problems existing in the students, so as to reflect the pertinence and effectiveness of the teaching content. Through ten years of hard work, the popularization of basic education in China has been significantly improved, and the popularization of compulsory education has reached the average level of high-income countries in the world. But there are still some challenges and problems. The key issues of basic education are mainly in the aspects of education evaluation, teacher team construction and education informatization and digitization.

3.2.1 Guided by the "Overall Plan for Deepening Educational Evaluation Reform in the New Era", Implement the Evaluation Content of Basic Education

For the educational evaluation of basic education, countermeasures and suggestions are put forward mainly from the perspective of school evaluation and teacher evaluation. First of all, school evaluation corresponds to institutional arrangements such as implementing the modern division of labor and improving the modern school system, on which the success or failure of educational reform and the level of educational development depend. School evaluation should pay attention to the realization of its own planning goals, pay attention to the internal governance structure and effectiveness, especially to strengthen the establishment and improvement of the internal quality assurance system, and further establish the main body of school education quality. Only by strengthening the internal quality system can we avoid unnecessary external intervention and reduce external intervention, so that there will be no quality management vacuum. Secondly, teacher evaluation corresponds to the teaching process of qualified teachers, which is the basic way of education quality, and the ideal characteristics of graduates must also be realized through teacher evaluation. Any concept of educational evaluation reform is meaningless if it cannot be successfully spread to the classroom through front-line teachers and change the learning outcomes of students. If classroom evaluation is not handled properly, it is easy to cause great damage to students' learning and growth.

3.1.2 Guided by the Policy of Publicly Funded Normal Students, Improve the Quality of Teacher Supply

Some scholars have put forward a series of suggestions to solve the problem of rural teacher shortage. First of all, "precisely approve" the number of teachers based on the school rather than the region (cities, counties, districts). Secondly, implement the urban and rural "new dual- track system" teacher staffing standards to solve the shortage of rural teachers. Finally, increase the flexibility of teacher staffing to solve the shortage of front-line teachers caused by the increase in the school-age population brought about by the changes in the national family planning policy, especially the second and third births of female teachers. Some scholars proposed to further improve the teacher personnel system and establish a benign rural teacher flow mechanism; expand local training units and set up a graded enrollment structure; expand the scope of policies to achieve a reasonable match between the supply and demand structure of teachers; strengthen educational support and improve rural education. career attractiveness of teachers. In addition, from the perspective of teacher supply, normal students are an important source of supplementary teachers. It is necessary to implement the policy of publicly funded normal students and the "Excellent Teacher Program" policy to provide high-quality teachers for underdeveloped areas in the central
and western regions.

3.2 Design classroom teaching activities

Dance teacher when designing classroom teaching activities, should give full consideration to the student has to master relevant knowledge of dance, reasonably extend the time of class activities, included in the link of the teaching activity form including basic knowledge of inspection, arrangement dance teaching, cooperative learning group, group dance results show, dancing, teaching effect evaluation, etc. By collecting, arranging and reading relevant journal literature, the questionnaire topics designed and designed for this topic were repeatedly deleted and revised, and finally the questionnaire was perfected. There are 25 questions in this questionnaire, including 23 objective questions and 2 subjective questions. The questionnaire mainly investigates the situation of English information teaching based on differential evolution algorithm on the students of two selected classes of undergraduate colleges from the perspective of learning situation, learning interest and academic performance.

3.2.1 Detection of basic knowledge

The dance teacher can ask the students questions to understand the students' knowledge of the preview before class. As far as dance teaching is concerned, students can master all the important and difficult points in teaching simply by using dance teaching videos. Therefore, the teacher's explanation and demonstration are particularly important. Meanwhile, it is necessary to organize students to have group discussion to solve problems. In the process of asking questions to students, dance teachers should choose open and stepped questions to improve students' interest in learning dance.

3.2.2 Assign dance teaching tasks

When students master the basic knowledge of dance, they need to further understand the important and difficult content of dance, combined with the learning tasks assigned by the dance teacher, to understand and master dance movements and skills. At the same time, before assigning tasks to students, dance teachers should fully grasp the actual situation of students and design scientific and reasonable phased learning tasks. Learning tasks of dance courses should follow the principle from easy to difficult.

3.2.3 Group cooperative learning

The dance teacher divides the students into several groups to carry out group cooperative learning, ensuring that each student can get equal rights to express their own ideas, the group members discuss and communicate with each other, share learning experience, understand their own shortcomings, and constantly enrich their own dance knowledge. Through group cooperation learning, it is also helpful to enhance students' sense of unity and cooperation, stimulate students' awareness of taking the initiative to participate in dance teaching, so as to improve students' interpersonal communication and ability to adapt to society.

3.2.4 Group dance results show

Current group cooperative learning has been extensively developed in the field of education, in the process of group cooperative learning, students can show dancing with the power of team learning outcomes, and to show others personal choreography creation of dance moves, effectively changed the past students passively accept the situation of the dance movements, fully embodies the principal position of students in the classroom teaching, Stimulate students to participate in dance learning subjective initiative, stimulate students' interest in learning. In addition, group cooperative learning mode is a more efficient learning mode, which can promote students to solve dance learning problems, exchange dance learning experience, share dance learning results and other activities.

3.2.5 Teaching effect evaluation

After students show their dance learning achievements, teachers should give students full affirmation and encouragement, and make objective evaluation of students' dance learning, so that students can correctly realize the problems existing in their own dance works and the places needing adjustment, the evaluation of teaching effect mainly consists of two forms. the first is teacher evaluation. Teachers give corresponding evaluation according to students' performance in dance class. the second is student evaluation. Teachers record students' dance works through mobile phones, cameras and other devices and upload them to the network platform to guide
students to express opinions and make comments on each other. By adopting the multi-subject evaluation method, it can embody the objectivity and comprehensiveness of evaluation and stimulate the students’ dancing learning effect.

4. CONCLUSION

To sum up, flipped classroom teaching mode plays a positive role in promoting dance teaching reform in secondary schools, and is also an education conforming to the development trend of the information age. It can not only stimulate students’ enthusiasm and initiative in learning dance, but also significantly improve the overall efficiency and effectiveness of dance teaching. Therefore, dance teachers in technical secondary schools also need to constantly improve their personal dance skills and professional qualities, build a reasonable and effective flipped classroom model, and give full play to the advantages of flipped classroom. Based on CiteSpace, an econometric statistical analysis software, this paper visualizes and analyzes the journal literature related to translators’ subjectivity from 1997 to 2022, and finds that: firstly, the research on translators’ subjectivity has received a lot of attention in China, and the number of research literature in recent years is in a flat state, but the overall trend is on the rise, and the research field is constantly broadening; secondly, scholars from the same institution or unit cooperate; third, research hotspots focus on the study of translators’ personal subjectivity in literary translations and the interpretation and analysis of translators’ subjectivity from a certain theoretical perspective; fourth, future research texts will focus on famous contemporary literary works and their translations, foreign translations of classical works of Chinese studies and foreign promotional texts, and research on translators themselves will focus on Fourth, the future research texts will focus on famous contemporary literary works and their translations, foreign translations of classical works of Chinese studies and foreign promotional texts, and the research on translators themselves will focus on such great translators as Ge Haowen and Xu Yuanchong, while the theoretical perspective of research will shift to the emerging translation theory and interdisciplinary theory.

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