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Adopting a Blended Learning Approach for Teaching Chinese Classical Dance

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Abstract

The main purpose of this study was to determine the effectiveness of the blended Chinese classical dance course in improving the dance performance of dance students at the College of Art and Design at Guangdong University of Petrochemical Technology, China. Opinions of students regarding their learning experiences in the blended learning environment were also obtained through a face-to-face interview. This research utilized a mixed methodology design. The quantitative part was the quasi-experiment to determine if the Chinese classical dance performance of students would improve after using the China Dance Network Application in a blended learning environment. The sample was selected using purposive sampling. The participants selected had not used China Dance Network Application before. There were four freshmen, two sophomores and five juniors who participated in the quasi-experiment. It was conducted for eight weeks to determine the effectiveness of the blended dance course. Before the quasi-experiment, participants took the pre-test and after eight weeks were completed, the participants took the post-test. Pre-test and post-test scores were compared and analyzed using the paired t-test. The qualitative part involved a face-to-face interview with all 11 participants. Results of the paired t-test showed that there were significant differences in the pre-test and post-test scores of the participants in terms of body rhyme, soft opening, dancing posture, rhythm style, and expressive force. Based on the interviews with 11 participants, they admitted that their dance performance had improved, the use of China Dance Network helped them in learning more about Chinese classical dance and they were more motivated in learning dance online and offline anytime. They used the Chinese Dance Network to learn dancing online, broadening their horizons, watching many dance videos, and learning more contents. The interviewees also added that compared with a single traditional classroom teaching, their interest in learning was stimulated.

Keywords: blended learning, classical Chinese dance, dance performance, China dance network application

Introduction

With the development of society and the progress of science and technology, network

technology has increasingly become an inseparable part of life. Science and technology make life easier and more convenient. It has permeated into all walks of life, with art being no exception. The same as many other art forms, dance is also greatly influenced by the development of new technologies. Whether one is a professional dance worker, or an amateur dance lover, wherever they are, as long as there is a network connection that can help them reach the applications or learning software, they can learn anytime and anywhere around the world about the knowledge of dance. Getting access to the global dance community increases students' awareness of dance from the external environment and broadens their dance communities. Online resources help to create new learning strategies, and at the same time, global community gets strengthened, making students know better about the concept of dance education (Parrish, 2008). Information technology greatly expands the breadth and depth of dance education. Through information technology, resources of dance education are greatly enriched and better integrated, which is to further support dance theory education and innovation, extending time and space for dance teaching (Huang, 2010).

The application of digital technology such as computers, smart phones, iPods, video cameras, and software for audio/ video and music editing, as well as online platforms such as YouTube, Youku, dance websites, and professional platforms designed for educational institutions (Lepczyk, 2009) offer more channels for students to extend their dance learning, facilitating them to obtain some useful information, or dance videos from the rest of the world. The emergence of dance network application is not only a tool for dance learning, but also a symbol of the development of learning approaches in time. Besides, they can also establish extra connections with their teachers and classmates through online communication and feedback. Comparing to the traditional dance teaching, nowadays many advanced educational technologies and methods have already been adopted in dance teaching, such as video recording technologies. The effective application of modern information technologies enriches the dance learning resources and expands the learning space for dancers, which builds a broader platform for the improvement of dancers' potential, as well as students' learning efficiency and quality. The use of technology for teaching dance is also supported by Gruno and Gibbons (2013), educators from the University of Victoria. They agreed that using technology in teaching dance may assist students in discovering student-centered lessons which could enhance their physical, cognitive and social perceptions (cited in Gradwohl, 2018).

As to dance network application platforms, there are a number of dance video applications which have been developed for dance learning. One is the so-called China Dance Network which the author selected for the blended learning of classical Chinese dance.

The reason for selecting China Dance Network as the application used in the study is that it is a mobile application specially designed for Chinese professional dancers with sufficient teaching resources, such as videos for classical dance. It is a communication

platform for all dancers, that includes photos, videos, music, shopping center, blog, BBS and Weibo. The network functions very well as a learning base, providing a number of online and offline dance courses. China Dance Network embraces four functions: public service, resource sharing, dance alliance and blog recommendation. It also presents the latest dance news in seven aspects from home and abroad, including Hot News in Dance circle, Dance Performance Activities, Event Reports, Figure Focus, Industry Analysis, International Dance News, and China Dance Network News, showing the significant role of CDN (China Dance Network) among dance applications.

The Network functions very well as a learning base, providing a number of online and offline dance courses. Since its establishment in November 2006, the total number of visits reached 8,017,129 with an average daily visit of more than 10,000 people, with visitors from 396 large, medium-sized and small cities in 39 regions in China and other countries. It ranks the 449,588th in the world with a Google PR Value of 5, which is still rising, especially in search engines, such as Google, Baidu, etc.

The author expected to improve students' performance of Chinese classical dance by using CDN Application on mobile phones in the process of teaching. The Chinese classical dance is a dance with Chinese characteristics, which is an art heritage passed on for several thousand years by the Chinese people. Based on the national traditional folk dance, the Chinese classical dance is refined, sorted, processed, and created by professional dancers, and is also tested in a long period of art practice inspection, making it a stylistic classical dance with a more profound cultural background. The Chinese classical dance is the resurgence of classical opera dance, a mixture being created between drama and dance. The traditional Chinese opera and martial arts are the cornerstones for the establishment of Chinese classical dance (Li Hongzhi, 2013). The techniques and skills in the basic training of Chinese classical dance have unique national characteristics, owning its own difficulties and artistic expressions, which are quite different from those in other dances (Jiang, 2008).

The main contents of Chinese classical dance teaching include basic skills and technical skills training, as well as "body rhyme" and emotional expression training. "Body rhyme" means "the combination of body and mind, the possession of the form of spirit, internal and external cultivation, completion in unity". Liu Rongchen (2017) put forward the importance of the soul and embodiment of the characteristics of Chinese classical dance.

The expressive power of Chinese classical dance is mainly the combination of skills and arts, the co-existence of appearance and mind, including external body movements and internal emotional expressions. Dance is the art of body language, which can express various emotions. The technical movements of Chinese classical dance are very difficult, with basic skill training and technical skill training being included for external body movements, such as jumping, spinning and cartwheeling. At the same time, there is a great variety of dancing postures in Chinese classical dance, with the basic dancing movements requiring a high degree

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of coordination of legs, body trunk, arms, head and eyes. Therefore, the training of basic dance movements is actually a means to acquaint the style of classical dance. For example, in basic dancing posture training, one leg is often kept still while the other leg moves in the air to form various dancing posture as shown in figure 1. Therefore, a good control of both legs and upper body part is required, which is one of the most important basic abilities in dancing.

Figure 1

Basic Chinese Classical Dance Movements

Background of the Study

The improvement of technical skills in dancing requires great basic skills as its foundation, which requires continuous practice over a long period of time (Zhang, 2017). However, due to the limited learning time in class and the present COVID-19 situation in China, the traditional face-to-face dance teaching mode can no longer meet the needs of students. Usually, the time for one class is one and a half hours, twice a week, making it difficult for students to acquire more dance knowledge through the face-to-face teaching mode. Teachers give very little attention to each student in class; thus, they cannot give feedback in time. There are too many students in one class, usually 10-25 students, or even more. For a dance class, this number is big. It is difficult for teachers to pay enough attention to every student and point out their problems. Therefore, some students are not motivated enough to learn and easily distracted. In addition, there is little communication and interaction between teachers and students in dance classes.

Another factor to look into is the teaching content of dance class. In fact, the content and the curriculum are made simple in order to meet the needs of students who usually have different levels of dance knowledge when they take the course. But for students with stronger abilities, the teaching content is not enough to satisfy their learning needs, which affects students' enthusiasm for learning which affects their development.

Therefore, the above problems existing in teaching dance in the university where the author teaches affect the performance of students, hindering them from obtaining more knowledge. Some dance teachers also in some instances are not able to meet the demands of students in a traditional classroom. The application of digital technology such as computers, smart phones, iPods, video cameras, and software for audio/ video and music editing, as well as online platforms such as YouTube, Youku, dance websites, and professional platforms designed for educational institutions (Lepczyk, 2009) could help achieve this purpose. The resources mentioned above offer more channels for students to extend their dance learning, facilitating them to obtain some useful information, or dance videos from the rest of the world. Besides, they can also establish extra connections with their teachers and classmates through online communication and feedback. Furthermore, there is an opportunity for them to reflect on their skills on practice, communication or integration and promotion of information resources. The effective application of modern information technologies in teaching and learning dance enriches the dance learning resources and expands the learning space for dancers, which builds a broader platform for the improvement of dancers' potential, as well as students' learning efficiency and quality. Taking all the above into consideration, the author decided to incorporate a dance technology into the teaching of Chinese Classical Dance.

In this study, a dance software, the China Dance Network, was used as the technology to teach Chinese classical dance outside the classroom and integrated with face-to-face teaching of Chinese classical dance.

The study sought to answer two research questions namely:

1. How effective is the blended learning in improving the students' Chinese classical dance performance in terms of body rhyme, soft opening, dancing posture, rhythm style and expressive force?
2. What are the students' opinions regarding their learning experiences in a blended learning environment?

The research objectives are:

1. To determine how effective the blended learning is in improving the students' Chinese classical dance performance in terms of body rhyme, soft opening, dancing posture, rhythm style and expressive force.
2. To explore the students' opinions regarding their learning experiences in a blended learning environment.

Variables of the Study

Variables of the study include blended learning, body rhyme, soft opening, body posturing, rhythm style, expressive force of Chinese classical dance.

Literature Review

Blended Learning

In the era of integration of digital new media industry, the space of dance art creation has shown diversified development. However, at present, most dance teaching still adopts the traditional classroom teaching method. Dance teaching has to undergo reform to improve students' enthusiasm and dance teaching. The recent rise of "blended learning" seems to offer an answer.

This theory of learning aims to combine the advantages of traditional learning methods with those of e-learning, namely, digital or network learning. As Tu (2018) stated, this theory had exerted a significant influence on the development of instructional design theory in order to improve the teaching quality in Chinese colleges and universities.

The definition of "blended learning" was proposed by Smith (2001) who combined the traditional learning concept with the pure technical learning concept of e-learning. In fact, he further described that blended learning mode is not a simple superposition of traditional teaching and network teaching. In a broad sense, blended learning mode refers not only to the mixing of two or more teaching forms, such as lecturing, discussion, research, case study, online learning, flipped classroom, etc., but also to the integration of various teaching strategies. With the development of the times and the progress of society, more teaching forms will be mixed in the future. Hogg (2004) believed that the blended teaching model combines the advantages of traditional teaching methods with the advantages of networked teaching. It not only gives play to the leading role of teachers in guiding, inspiring and monitoring the teaching process, but also fully reflects the initiative, enthusiasm and creativity of students as the subject of the learning process, so as to achieve better teaching effects.

According to Kew, et al. (2018), research has shown that blended teaching is conducive to deepening learning. In order to promote the realization of deep learning, blended learning emphasizes situational learning and activity learning. In blended learning, students are encouraged to develop their habits, beliefs, personalities, and skills by participating in groups of hands-on learning activities and working as apprentices with peers to observe their peers' behavior.

Curriculum design that blends multiple learning methods is an inevitable requirement of the class teaching system. Blended learning course design of the traditional classroom instruction and online learning can handle some problems that the classroom teaching cannot, including providing students with more opportunities for feedback, promoting study within the group and so on to provide a satisfactory solution for large capacity class teaching. In addition, the benefits of virtual learning environment cannot be ignored. Research has shown that virtual learning environment can provide support for blended learning mainly in three

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aspects, namely providing students with information about various aspects of the course, making up for the deficiency of students' classroom learning, and providing online learning resources for students to visit and browse (Ward, 2006).

Chinese Classical Dance

The Chinese classical dance is an artistic expression that has been refined, organized, processed by professional workers of ages. It has been tested by artistic practices over a long period of time, and considered as an exemplar of dance with classical characteristics. Chinese classical dance was initially developed after the establishment of the People's Republic of China. It is based on the traditional Chinese opera dance and borrows movements from martial arts and has been standardized and unified by the ballet training system (Zhu, 2019). All of these consist of the existing figure of reconstructed China classical dance. From the perspective of culture, the body language of Chinese classical dance is to conform to national and traditional characteristics that exist in traditional culture. It has a standardized dance skill system, typical dance performance, exemplary dance style, and stable dance culture. Yuan (2019) described that from the perspective of aesthetics experience. Chinese classical dance highlights unity and preciseness, standardized expressions and a mixed dance tradition characterized by unique cultures and traditions.

Based on the national traditional folk dance, the Chinese classical dance is refined, sorted, processed, and created by professional dancers, and is also tested in a long period of art practice inspection, making it a stylistic classical dance with a more profound cultural background. The Chinese classical dance is the resurgence of classical opera dance, a mixture being created between drama and dance. The traditional Chinese opera and martial arts are the cornerstones for the establishment of Chinese classical dance (Li Hongzhi, 2013). The techniques and skills in the basic training of Chinese classical dance have unique national characteristics, owning its own difficulties and artistic expressions, which are quite different from those in other dances (Jiang, 2008).

Chinese classical dance is different from other dance types. It has its own characteristics in technical skills and dance performance. They comprise body rhyme, soft opening, dancing posture, and expressive force.

Body Rhyme in Chinese Classical Dance is the generic term of "body skills" and "rhythms". Ying (2020) mentioned body rhyme can truly reflect the essence and aesthetics of Chinese classical dance, which is the soul of Chinese classical dance. The core factors of Chinese classical dance are "form, emotion, strength and rhyme" (Lan, 2014). Form refers to the external movements, including postures and the moving traces connected by postures and movements. Emotion is the spirit within dance, playing the dominating role. Strength is the body for dancing, containing the artistic handling of the relations among weight, priority, strength, length, rigidness and softness. Rhyme refers to the law of movements within motion

itself. Strength and rhyme are usually exhibited by body rhyme and movement rhythm. According to Xie (2018), the relationship between these four elements of action is to achieve both form and spirit through strength and rhythm, with internal and external unity.

Soft opening is the technical term for dance, which is also called flexibility or stretching training. Softness refers to the range of motion of human body single joint or joint group (Yu, 2005).

Dancing Posture directly conveys the value of dance and embodies the cultural characteristics of its dance (Xu, 2017).

Expressive Force in dance refers not only to the usually understood facial expressions of pleasure, anger, sorrow, and joy, but also the physical and mental fusion in dancing, which requires action, eyes and expressions to be unified. A dancer needs to make their own interpretations on the content and emotions of a dance work, and then present them to the audience through the physical and emotional performance (Ai，2019).

China Dance Network

China Dance Network is a mobile Application specially designed for Chinese professional dancers and dance hobbyists, which is a communication platform for all dancers. The content includes dance resources, dance works, basic knowledge of dance, dance learning, dance teaching, performance and choreography and comments. The Network functions very well as a learning base, providing a number of online and offline dance courses. The dance video resources in this APP are relatively comprehensive, and it can play videos slowly, which is more conducive for self-learning.

China Dance Network, a professional dance online platform, boasts four major functions which are public service, resource sharing, dance alliance and blog recommendation. It is in sync with the transition of Chinese dance performance learning from offline to online and from static space to dynamic space. China Dance Network, attempting at improving students' dance performances, is a comprehensive provider for online dance courses.

China Dance Network provides high-quality and a large number of teaching videos. Teachers from all over China can choose to include dance teaching content in the form of videos or pictures. After using network technology to process all kinds of information, the dance videos or pictures uploaded to the China Dance Network application platform can be used as effective learning resources to provide certain help to those in need. First, since the traditional dance model is relatively simple and faces a limited number of students, the online platform can improve this situation by providing a large number of teaching videos. Second, it is convenient for self-study. As the traditional dance model is based on fixed learning materials for teaching, the collection of course material is a no easy task when additional tasks are adopted for greater improvement. However, China Dance Network application has solved this

problem; it provides varied course choices and a simultaneous platform for students to consult teachers. This ensures right direction and learning progress. Third, learning materials can be shared. As the network world is well-connected and can connect people in different parts of the world, China Dance Network application can offer varied types of dance forms. This is attributable to students' dance performances and provides more dance information for their self-improvement. (China Dance, 2020).

Blended Learning for Dance Courses

Although dance and technology are two different disciplines, technology has recently played an important role in teaching traditional dance in dance classes. Interactive technologies are now being utilized with traditional teaching and learning of dance as self-learning tools outside the dance studio. Music, text, videos and other dance features could be integrated in these technologies for learning outside the classroom (Huang, 2020).

In modern dance teaching, the effective adoption of scientific technologies can better motivate students in dance learning, exercise their independent learning ability, so as to achieve the goal of improving the performance of dance learning. It is very difficult for students to learn classical Chinese dance only in the classroom because time is far from enough for students to learn in the classroom.

How to improve students' artistic expression performance is the difficulty and key point in the teaching of Chinese classical dance. Chinese classical dance uses the human body's naturality; it does not require specifically training individual muscles. In other words, the muscle strength is gained naturally through walking, running, jumping, climbing stairs, riding a bicycle, etc., and the upper-body strength naturally built through physical labor, is further strengthened in the course of training (Li Hongzhi, 2013).

Blended learning design is needed to develop students' professional dancing skills. Blended teaching is the teaching summarized from practical explorations. A Korean scholar Lee (2019) conducted such a research on dance teaching, which is based on the blended teaching of dance education and dance technology to develop dance teaching content. Dance education was taught twice a week in the form of video and face-to-face teaching. In addition, the professor gave quizzes to check the learner's understanding and provided a mini-lecture when additional explanations were needed. In offline teaching, mixed learning can expand the scope of personality education through problem learning, cooperative learning and peer learning through discussion learning, so as to improve the positive effect of blended learning. The results show that this new curriculum plan is of great help to help students get familiar with dance knowledge and improve their practical dance skills.
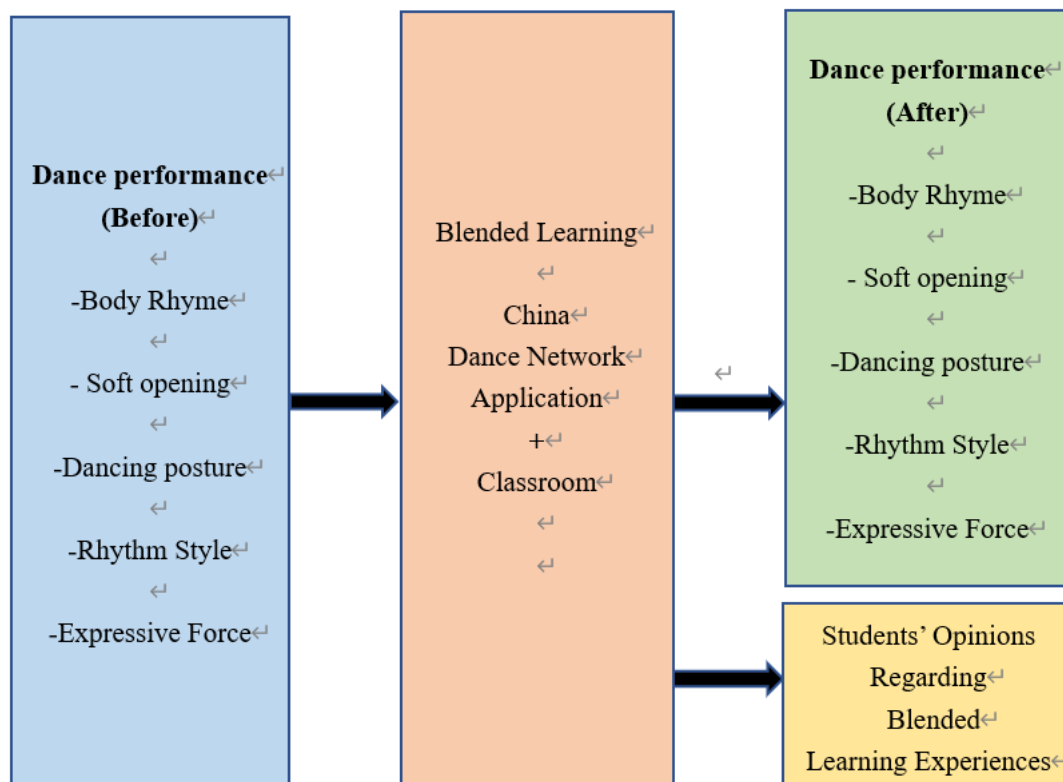
Practical application of blended teaching curriculum design and blended teaching will bring more and more students with optimized learning results.

Yu (2016) comprehensively summarized the development of Chinese classical dance in recent years from the perspective of discipline construction. In the research, he combed the construction of Chinese classical dance discipline and put forward the important development goals in this field that are 'discipline construction', 'academic research', 'academic idea' and 'comparative mechanism'. Based on 'form', Tian (2015) combed the construction of the early development of classical Chinese dance and provided references for the future discipline construction from different perspectives.

With the availability of the Internet, the acquisition of dance knowledge is enhanced and the precise relationship between the two appeals to researchers. Parrish (2008) put forward a website design in which video conferences in teaching, training, and rural instruction enabled dance practitioners to develop their performance skills. In the same year, Karkou, Bakogianni & Kavakli (2008) developed a blended trail dance learning environment through the Internet for an online dance project within the European territory. The tools included are two units of dance courses and 3D animation. In the UK, they also had found that web-based tools can be utilized to create attractive and functional dance resources that can support the teaching of traditional dance to young people. Some scholars pointed out that it is inadequate to only provide online videos or digital learning materials to support courses. For example, DeWitt, et al. (2013) pointed out that the method of watching online videos fail to sharpen dance skills since they could not provide illustrations which are essential to correct movements. What is more, many of the students found it strenuous to give proper comments on their dance performances. Thus, what are cornerstones for students are verbal instructions to strengthen their dance techniques. However, it is unrealistic for instructors to offer feedback to every student in a class (Goldstein, 2007). It means that the traditional study activities (e.g., assessment) can be achieved through website (Boud, Cohen & Sampson, 2014).

The emergence of multimedia technology generates new hope for the preservation of intangible heritage and the annotation of dance performances. Since dance can transfer numerous information including space, movements, sound, color, costumes and paraphernalia, the document of dance data is essentially reliable on multimedia technology (Golshani, Vissicaro & Park, 2004).

Conceptual Framework

Dance performance (Before)
-Body Rhyme
- Soft opening
-Dancing posture
-Rhythm Style
-Expressive Force

Blended Learning
China Dance Network Application
+
Classroom

Dance performance (After)
-Body Rhyme
- Soft opening
-Dancing posture
-Rhythm Style
-Expressive Force

Students' Opinions Regarding Blended Learning Experiences

Methodology

This study utilized a mixed method design. The quantitative part was the quasi-experiment to determine if the Chinese Classical dance performance of students in terms of body rhyme, the soft opening, dancing posture, rhythm style and expressive force would improve after using the China Dance Network Application in a blended learning environment. In qualitative part, the author interviewed all the 11 participants, who could put forward their opinions about their experiences in the blended learning dance course using China Dance Network Application in learning Chinese classical dance.

Population

There were 25 dance majors from freshmen to seniors in the School of Art and Design of Guangdong University of Petrochemical Technology in Maoming city.

Sample and Sampling Technique

The sample was selected by using purposive sampling. The researcher selected participants who had not used China Dance Network Application before. As the seniors

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graduated and not had dance classes anymore, the participants were freshmen, sophomores and juniors who had not used the China Dance Network Application. There were four freshmen, two sophomores and five juniors who participated in the study.

Research Process

Figure 2

Research Process
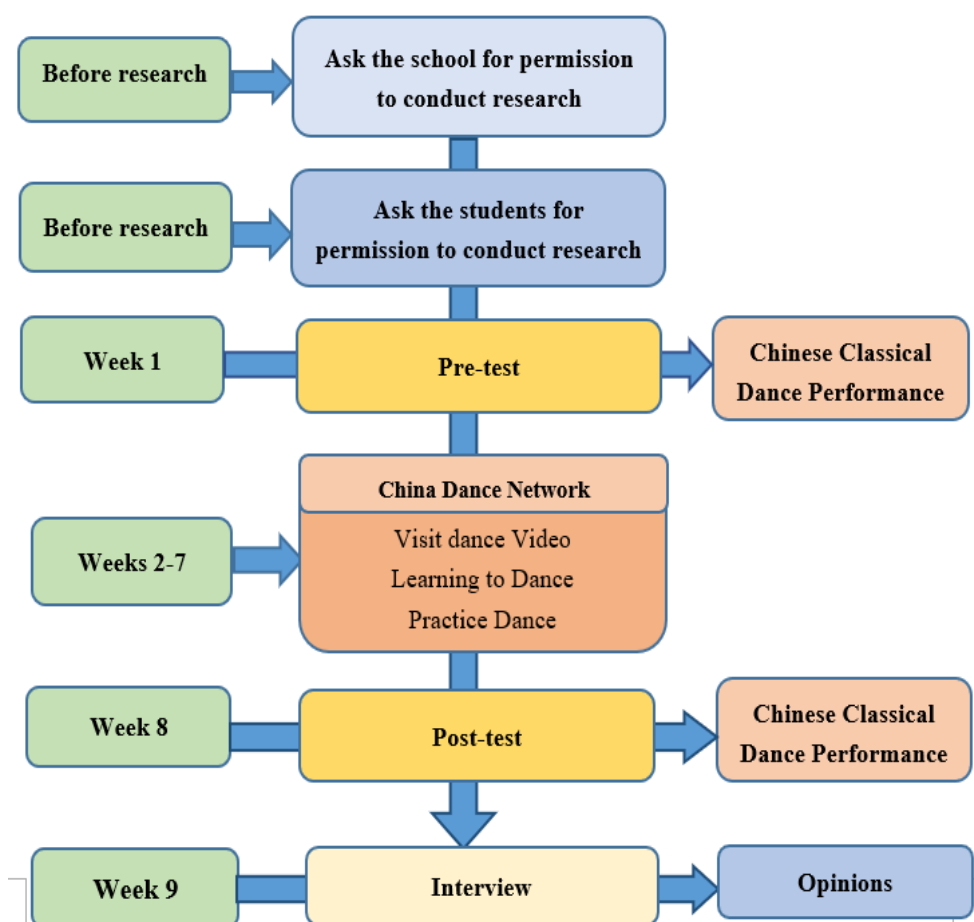
Research Instrument

Quantitative Part

Pre-test and post-test on dance performance of the participants in terms of body rhyme, the soft opening, dancing posture, rhythm style and expressive force were conducted to answer the first research question "How effective is the blended learning in improving the students' Chinese classical dance performance in terms of body rhyme, soft opening, dancing posture,

rhythm style and expressive force?" Three dance teachers evaluated the dance performance of students based on the evaluation criteria shown in table 1.

Table 1

Evaluation Criteria

Evaluation Standard Score					
Body Rhyme	Soft Opening	Dancing Posture	Rhythm Style	Expressive Force	Total
20	20	20	20	20	100

These evaluation criteria are the standards prescribed by the Beijing Dance Academy and are also used at Guangdong University of Petrochemical Technology where the author teaches and conducted the study. In China, Beijing Dance Academy is the highest institution of dance major, and it is the authority in dance education. Therefore, the evaluation standard formulated by Beijing Dance Academy is reliable. The scores are divided into three categories: 17-20 excellent, 13-16 average and below 12 poor.

Since the performance of Chinese dance mainly includes the evaluation of movements, expressions, softness and skills, the evaluators carried out detailed evaluation on each part and finally obtained the scores for the pre-test and post-test. There were 20 scores for each part, 100 scores in total.

The study put forward the following hypotheses to determine the effectiveness of the blended learning using the China Dance Network.

Ho: There is no difference in the students' dance performance in terms of body rhyme, the soft opening, dancing posture, rhythm style and expressive force before and after learning in a blended learning environment using the China Dance Network.

Ha: There is difference in the students' dance performance in terms of body rhyme, the soft opening, dancing posture, rhythm style and expressive force before and after learning in a blended learning environment using the China Dance Network.

The study was conducted from October 12, 2020 to December 11, 2020 (a total of 9 weeks). The sample in this research who were selected purposively included four freshmen, two sophomores and five juniors, who had never used China Dance Network Application. The seniors did not participate because they were on internship. Before the research, the author asked the university and the students' permission to conduct the research. The research process took 9 weeks. Dance courses in Guangdong University of Petrochemical Technology usually last 16 weeks: 8 weeks for Chinese classical dance, 8 weeks for ballet and modern dance.

Consequently, the author conducted the research during the 8 weeks of Chinese classical dance and the interview was done in the ninth week.

The pre-test was conducted in the first week. The 11 participants demonstrated Chinese classical dance before 3 expert dance teachers who evaluated their performance according to the criteria specified in Table 1.

Figure 2

Pre-test

From week 2 to week 7, the author used a blended learning approach. The author taught the basic theory of classical dance in class. After class, students watched videos approved by the author on China Dance Network about Chinese classical dance and learn how to perform it. In class, the author pointed out and corrected students' mistakes.

Students chose five 3-6 minute Chinese classical dance videos on the Chinese Dance website, and the content of the video should include the teaching content formulated and approved by the author. For example, for freshmen: hand practice, sophomore: soft practice, junior: performance practice. From week 2 to week 7, students watched one video each week. Students downloaded the videos to their mobile phones or computers to watch and learn after class. The author asked the students to learn the Chinese dance videos they chose in segments. Every week, in class, students should give a report on the learning content of the Chinese dance videos. In this way, the author could follow up the progress and degree of students' learning through the Chinese dance network after class. The researcher gave guidance and feedback according to the performance of students in class, and pointed out the incorrect dance movements of students and corrected them. After class, students could use the Chinese dance network to study the content of the course anytime and anywhere. They could study at home or practice by themselves in the dance classroom. Over the course of six weeks, students performed a complete piece of Chinese classical dance.

In the eighth week, the students had the post-test using the same procedure as that of the pre-test. The same three dance teachers who evaluated the pre-test also evaluated the post-test.

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Figure 3

Post-test

The average pre-test and post-test scores of the three evaluators were analyzed using the paired t-test to determine if there was a significant improvement in the dance performance of the participants in terms of body rhyme, soft opening, dancing posture, rhythm style and expressive force after participating in the blended class using the China Dance Network.

The average pre-test scores of each of the 11 participants are shown in Table 2.

Table 2

Average Pre-test scores of 11 students

Participants	First Teacher's Scores	Second Teacher's Scores	Third Teacher's Scores	Average Pre-test Scores
1	76	75	80	77.00
2	70	70	70	70.00
3	75	74	76	75.00
4	72	73	75	73.33
5	78	78	81	79.00
6	75	71	77	74.33

7	75	74	75	74.67
8	83	83	82	82.67
9	85	84	84	84.33
10	83	83	82	82.67
11	79	71	79	76.33

The average post-test scores of each of the 11 participants are shown in Table 3.

Table 3

Average Post-test scores of 11 students

Participants	First teacher's Scores	Second teacher's Scores	Third teacher's Scores	Average Post-test scores
1	81	80	79	80.00
2	73	75	70	72.67
3	73	78	78	76.33
4	79	79	80	79.33
5	80	79	84	81.00
6	83	81	86	83.33
7	81	84	83.5	82.83
8	84	80	81	81.67
9	87	87	87	87.00
10	90	89	88.5	89.17

11	90	88	89.6	89.20

Results of the paired t-test of the average pre-test and post-test scores of body rhyme, the soft opening, dancing posture, rhythm style and expressive force are outlined in Table 4.

Table 4

Paired Sample t-test of the Average Pre-test Scores and Post-test Scores of Body Rhyme, Soft Opening, Dancing Posture, Rhythm Style and Expressive Force

Paired Samples Test

| | Paired Differences | | | | | | | |
| | | | | 95% Confidence Interval of the Difference | | | | Sig. (2-tailed) |
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	Df	
Pair 1 Total1 - Total2	-4.54545	3.98406	1.20124	-7.22198	-1.86893	-3.784	10	.004

Results of the paired sample t-test of average pre-test scores and average post-test scores of body rhyme, the soft opening, dancing posture, rhythm style and expressive force as shown in table 4 show that there is a significant difference in the scores of pre-test scores and post-test scores: t (10) = -3.784, p = .004, p < .05. The author conducted SPSS analysis on each of the 5 areas and the results are shown in Tables 5, 6, 7, 8 and 9.

Table 5

Paired t-test on Body Rhyme

Paired Samples Test

| | Paired Differences | | | | | | | |
| | | | | 95% Confidence Interval of the Difference | | | | Sig. (2-tailed) |
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	Df	
Pair 1 BodyRhyme1 - BodyRhyme2	-.97091	1.03165	.31106	-1.66398	-.27783	-3.121	10	.011

Results of the t-test for body rhyme shows that there is a significant difference in the pre-test and post test scores: t (10) = -3.121, p =.011, p < .05.

Table 6

Paired t-test on The Soft Opening

Paired Samples Test

		Paired Differences							Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	Df	
Pair 1	Thesoft1 - Thesoft2	-1.30455	1.71029	.51567	-2.45354	-.15555	-2.530	10	.030

Results of the t-test for soft opening shows that there is a significant difference in the pre-test and post-test scores: t (10) = -2.530, p = .030, p < .05.

Table 7

Paired t-test on Dancing Posture

Paired Samples Test

		Paired Differences							Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	Dancingposture1 Dancingposture2	-.69818	.67646	.20396	-1.15263	-.24373	-3.423	10	.007

Results of the t-test for dancing posture shows that there is a significant difference in the pre-test and post-test scores: t (10) = -3.423, p = .007, p < .05.

Table 8

Paired t-test on Rhythm Style

Paired Samples Test

	Paired Differences							
				95% Confidence Interval of the Difference				Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1 Rhythm style1 – Rhythm style2	-.90727	1.23913	.37361	-1.73973	-.07481	-2.428	10	.036

Results of the t-test for rhythm style shows that there is a significant difference in the pre-test and post-test scores: t (10) = -2.428, p = .036, p < .05.

Table 9

Paired t-test on Expressive Force

Paired Samples Test

	Paired Differences							
				95% Confidence Interval of the Difference				Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1 Expressive force1 - Expressive force2	-.98909	1.34114	.40437	-1.89008	-.08810	-2.446	10	.034

Results of the t-test for Expressive Force shows that there is a significant difference in the pre-test and post-test scores: t (10) - -2.446, p = .034, p < .05.

The above paired t-test results showed that the blended teaching method had improved the performance of students in terms of Body Rhyme, Soft Opening, Dancing Posture, Rhythm Style and Expressive Force of Chinese dance. Thus, the hypothesis "there is no significant difference in dance performance of students in terms of Body Rhyme, Soft Opening, Dancing Posture, Rhythm Style and Expressive Force after learning in a blended learning environment using the China Dance Network" was rejected.   The summary of hypotheses testing of each individual criterion is shown in Table 10.

Table 10

Summary of the Hypotheses Testing

Item	Ho (Null Hypothesis)	Result
Body Rhyme	There is no difference in the students' dance performance in terms of body rhyme after learning in a blended learning environment using the China Dance Network.	Reject Ho
Soft Opening	There is no difference in the students' dance performance in terms of soft opening after learning in a blended learning environment using the China Dance Network.	Reject Ho
Dancing Posture	There is no difference in the students' dance performance in terms of dancing posture after learning in a blended learning environment using the China Dance Network.	Reject Ho
Rhythm Style	There is no difference in the students' dance performance in terms of rhythm style after learning in a blended learning environment using the China Dance Network.	Reject Ho
Expressive Force	There is no difference in the students' dance performance in terms of expressive force after learning in a blended learning environment using the China Dance Network.	Reject Ho

As shown in Table 10, the null hypotheses were rejected. There is difference in the students' dance performance in terms of body rhyme, the soft opening, dancing posture, dance style and expressive force before and after learning in a blended learning environment using the China Dance Network. Blended learning method is effective, which is reflected in the improvement of students' Chinese dance performance.

In a word, this study confirms the advantages of blended learning. In terms of the dancing performance, students have shown progress. At the end of the study, the students expressed their willingness to continue to learn in this way.

Qualitative Part

In order to answer research question 2 "What are the students' opinions regarding their learning experiences in a blended learning environment?" a face-to-face interview with all eleven participants was conducted in order to determine their opinions regarding the blended dance course, their experiences and the use of China Dance Network application in learning the Chinese classical dance outside the class. There were four questions:

1. Have you heard of the China Dance Network before? From whom/where?
2. After using it in the blended learning environment, do you think it can help you improve your dancing？ How?
3. Did you have any problems using the China Dance Network Application? If yes, what are they?
4. What are your opinions about using technology in teaching and learning dancing?

5. Tell me about your learning experiences in a blended learning environment. What do you think about this learning environment?

　　Three professors who are experts in dance validated the Interview Questions for content validity. All the three experts rated the 5 questions 4 = very suitable. The S-CVI/UA：5/5 = 1.00

　　The main and significant opinions of the 11 participants are summarized in Table 11.

Table 11

Summary of the Main Opinions

Participant	Blended Learning Environment (What do you think about this blended learning environment?)	Technology (What are your opinions about using technology (China Dace Network) in teaching and learning dancing?)	Learning Experiences (Tell me about your experiences in a blended learning environment)
1	improve dancing	more advantages and enhance the interest of learning.	greatly enhancing students' interest in learning.
2	improve dancing	more dance resources	online classes at home, which is very convenient.
3	improve dancing	learn more dance knowledge.	improve the efficiency of dance learning.
4	improve dancing	Convenient	stimulated my interest in learning, and had a strong learning atmosphere.
5	improve dancing	learning efficiency is improved	more interested in learning dance.
6	improve dancing	learn dance better	practice with video when there is no teacher to teach.
7	improve dancing	improving efficiency, bringing new experiences	study at any time even at home
8	improve dancing	more novel	This kind of learning environment tests one's consciousness even more
9	improve dancing	very good	It is very novel to increase the interest of learning
10	improve dancing	a very good progress	broadens my horizon and enables me to learn more knowledge
11	improve dancing	quite good	facilitate me to take out my mobile phone to learn anytime and anywhere

The face-to-face interview with students shows that all eleven interviewees believe that the blended learning environment has improved their dancing performance and is more effective than the traditional single face-to-face teaching because China Dance Network has provided them more help to learn Chinese classical dance because of the many dance resources it could provide. They can learn more knowledge through various learning methods online and in class.

Discussion

The quasi-experiment was conducted in order to answer the first research question "How effective is the blended learning in improving the students' Chinese classical dance performance in terms of body rhyme, soft opening, dancing posture, rhythm style and expressive force?" Results of pre-test and post-test show that the dance performance of students improved in all these areas and the paired t-tests reveal that there are significant differences in the pre-test and post-test scores after learning in the blended dance course. Learning dancing in a blended learning environment using technology which in this study, the China Dance Network has the capability of improving the students' dance performance in terms of body rhyme, soft opening, dancing posture, rhythm style and expressive force as shown in the following paired t-test results of the average scores of all five areas as well as each category of dance performance.

Results of the paired sample t-test of average pre-test scores and average post-test scores of all five areas as shown in table 4 shows that there is a significant difference in the scores of pre-test scores and post-test sores: $t(10) = -3.784$, $p = .004$, $p < .05$.

Results of the t-test for body rhyme in table 5 shows that there is a significant difference in the pre-test and post-test scores: $t(10) = -3.121$, $p = .011$, $p < .05$.

Results of the t-test for soft opening in table 6 shows that there is a significant difference in the pre-test and post-test scores: $t(10) = -2.530$, $p = .030$, $p < .05$.

Results of the t-test for dancing posture in table 7 shows that there is a significant difference in the pre-test and post-test scores: $t(10) = -3.423$, $p = .007$, $p < .05$.

Results of the t-test for rhythm style in table 8 shows that there is a significant difference in the pre-test and post-test scores: $t(10) = -2.428$, $p = .036$, $p < .05$.

Results of the t-test for Expressive Force in table 9 shows that there is a significant difference in the pre-test and post-test scores: $t(10) = -2.446$, $p = .034$, $p < .05$.

Results of the paired t-test reveal that the blended Chinese classical dance course was effective in improving the dance performance of students in terms of body rhyme, the soft opening, dancing posture, rhythm style and expressive force which answer research question 1. The China Dance Network played an important role in the improvement of dance performance of the participants. The use of modern teaching methods and technology motivate

students to learn dancing through images, text and videos which enliven the boring face to face classes (Zongnan, 2019). According to Zongnan (2019), as Chinese dance involves movements of the different parts of the body, this can be taught in the classroom but multimedia courseware could help students repeatedly review the important and different points pointed out by the teacher in the classroom training especially to those students who are slow to learn and cannot correct themselves during the dance class; however, when they watch the dances online, they can better understand the dance actions. This is supported by the research of Li and Teo (2018), who found that students who studied dance through videos were able to analyze how they dance more critically. This is a form of student-centered learning (Li and Teo, 2018, as cited in Huang, 2020).

As for research question 2 "What are the students' opinions regarding their learning experiences in a blended learning environment?" students demonstrated their positive attitude towards the blended dance course. All the students confirmed during the face-to-face interview that their dancing performance and skills have improved after participating in the blended dance course. They also affirmed that the use of technology in learning dance had motivated them to learn more about Chinese classical dance because of the various videos they could watch and download from China Dance Network showing techniques of dancing Chinese classical dance. They indicated positive learning experiences in the blended dance course. Based on these opinions of students, they believe that the blended learning is more effective than the traditional single face-to-face teaching and has provided them more help to learn Chinese classical dance. They can learn more knowledge through various learning methods online through the China Dance Network and in class where the teacher points out mistakes they have done and offers advice on how to improve them.

Professor Hogg Kang (2004) believes that the blended teaching model combines the advantages of traditional teaching methods with the advantages of networked teaching. It not only gives play to the leading role of teachers in guiding, inspiring and monitoring the teaching process, but also fully reflects the initiative, enthusiasm and creativity of students as the subject of the learning process, so as to achieve better teaching effects. Students pay attention to specific steps and movements while in the dance studio but they learn and distinguish what is good performance and what is not when they watch other dancers in the videos (Huang, 2020) posted in China Dance Network. As this form of learning follows constructivism, students process the information they see on videos and become active builders of meaning. The role of the teacher is just the helper and facilitator (Dragon, 2015).

However, many published research projects on the use of technology in the teaching of dance focus more on the developments of software and the design of interactive learning platforms (Risner, & Anderson, 2008 cited in Dania, et al, 2011), but not on their influence on dance performance in real time. In few cases the characteristics of these applications are evaluated qualitatively but not quantitatively (Dania, et al, 2011). However, this study not only

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proves the benefits of technology in teaching dance but also indicates its potential in improving dance performances in real time quantitatively.

Conclusion and Recommendation

The blended learning approach for teaching Chinese classical dance has improved the dance performance of students in the study. Paired t-test results show there is difference in the students' dance performance in terms of body rhyme, the soft opening, dancing posture, dance style and expressive force after learning in the blended learning environment using the China Dance Network. It could be assumed that the blended learning method for dance was effective in improving the Chinese dance performance of the participants.

In a word, this study confirms the advantages of blended learning. In terms of the dancing performance, students have shown progress. At the end of the study, the students expressed their willingness to continue to learn in this way.

Implications for Practice

As the world is still facing the COVID-19 pandemic, teaching dancing in normal studios in the universities becomes very limited. As the end to this pandemic is not in sight, many universities have come up with full-online or hybrid courses to carry out teaching and learning. Dance classes are no exception. It is believed that a shift to virtual platforms for dance learning are here to stay. There are positive benefits to this "new normal" dance pedagogy. Some online platforms for dance courses are interactive in which students can ask for clarifications, review past materials and use them for dance improvement (Munjee, 2020) as China Dance Network.

These types of instruction, the hybrid or blended learning offer alternatives or options   into dance study. They can also be lucrative income sources for dance professionals who want to scale up their teaching. They can offer a range of dance performances which could be made available and affordable for students who might not otherwise have access and allows multiple people in different time zones and places to dance together. Through this, students are able to connect with those distanced—in so many ways—from their particular college habitat (Munjee, 2020).

Recommendations

As there are many forms of technology that can be used in teaching and learning dance, researchers or dance instructors could experiment on the use of other forms of virtual platforms in teaching dance. Hybrid or blended learning takes many forms as well, thus, looking into these other options could help dance educators choose the best option

for their students. Results of this study could serve as guideline in planning a blended learning approach to teaching dancing.

References

Ai, M. (2019). Emotional expression in the performance of Chinese classical dance: A case study of Li tang School Classical Dance. [Master thesis, Shandong University, Shandong].

Boud, D., Cohen, R., & Sampson, J. (2014). Peer learning in higher education: Learning from and with each other. *Routledge.*

Dania, A. et al. (2011). The use of technology in movement and dance education: recent practices and future perspectives. *Procedia Social and Behavioral Sciences, 15(2011)*, 3355-3361.

DeWitt, D., Alias, N., Siraj, S., Yaakub, M. Y., Ayob, J., & Ishak, R. (2013). The potential of Youtube for teaching and learning in the performing arts. *Procedia-Social and Behavioral Sciences, 103*, 1118-1126.

Dragon, D. A. (2015). Creating cultures of teaching and learning: conveying dance and somatic education pedagogy. *Journal of Dance Education, 15(1),* 25-32.

Goldstein, J. (2007). Easy to dance to: Solving the problems of teacher evaluation with peer assistance and review. *American Journal of Education, 113(3),* 479-508.

Golshani, F., Vissicaro, P., & Park, Y. (2004). A multimedia information repository for cross cultural dance studies. *Multimedia Tools and Applications*, *24(2),* 89-103.

Gradwohl, A.K. (2018). Perceptions of technology in dance education: The effect of technology on student learning and teaching strategies of the twenty-first century skills in dance education. [Master's Theses, University of Northern Colorado]. https://digscholarship.unco.edu/theses/74.

Hogg, K (2004). On the new development of educational technology theory from the perspective of blending learning (I). *China Audio-visual Education,* 5-10.

Huang, J. (2020). Analysis on the advantages and disadvantages of using multimedia courseware in Chinese folk dance classes. *Review of Educational Theory,* 3(3)*. https://ojs.bilpublishing/com/index.php/ret.

Huang, Q.（2010. The impact of digital media technology on dance viewed from the internet. *Popular Literature*，2-3.

Jiang, D. (2008). Study on the development of Chinese classical dance. *A research on the development of Chinese classical dance*. [Doctoral dissertation].

Karkou, V., Bakogianni, S., & Kavakli, E. (2008). Traditional dance, pedagogy and technology: An overview of the WebDANCE project. *Research in Dance Education*, *9(2),* 163-186.

Kew, S. N., Petsangsri, S., Ratanaolarn, T., & Tasir, Z. (2018). Examining the motivation level of students in e-learning in higher education institution in Thailand: A case study. *Education and information technologies, 23(6),* 2947-2967.

Lan, T. (2014). Determination and zeal in Chinese Classical Dance. *Journal of Beijing Dance Academy (01),* 84-86.

Lepczyk, B. (2009). Technology facilitates teaching and learning in creative dance. *Journal of Physical Education, Recreation & Dance*, *80,* 4-8.

Li Hongzi (2013). What is Chinese classical dance. *Shenyun Performing Arts.* https://www.shenyunperformingarts.org/news/view/article/e/Q6sayPy28ic/what-is-classical-chinese-dance.html.

Li, J. (2019). A study on the university dance teaching-learning contents using blended learning. *Research of Dance Education, 30(1)*, 19-38.

Liu, R. (2017). Analysis of the beauty of Chinese classical dance-talking from charm, tranquility, and naturalness. *Art Education (1)*, 122-123.

Munjee, T. (2020, July 15). Dancing away in our own little boxes. *Family Focus.* https://www.facultyfocus.com/articles/online-education/online-course-delivery-and-instruction/dancing-away-in-our-own-little-boxes/

Parrish, M. (2008). Integrating technology into the teaching and learning of dance. *Journal of Dance Education*, *1(1),* 20-25.

Smith, J. M. (2001). *Blended learning*: Executive Update Online.

Tian, T. (2015). The form construction of Chinese classical dance in the early period. *Journal of Beijing Dance Academy,* (1), 60-65.

Ward, G. (2006). Flexible delivery: A report on an evaluation of the use of the virtual learning environment in higher education across Scotland. *Springer International Publishing.*

Xu, P. (2017). The inheritance and development of Classical dance in Han and Tang Dynasties can be seen from the generation of dynamic and static dance moves and the meanings conveyed. *Art and Literature for the Masses*, *000(019),* 145, 250.

Ying, G. (2020). Research on the teaching practice of Chinese classical dance body rhyme. [Master's thesis, Shenyang Normal University, Shenyang].

Yuan, S. (2019). Analysis of the artistic features and development direction of Chinese classical dance. *Northern Music*, *39(05),* 233-234.

Yu, N. (2005). A preliminary study on the soft opening of Chinese classical dance. *Journal of Deyang Education College*, *19(3),* 39.

Yu, P. (2016). The Chinese classical dance in the perspective of discipline construction. *Arts Criticism*, *151(06),* 10-11.

Xie, L. (2018). The aesthetic significance and thinking analysis of "form, spirit, strength and law" in Chinese classical dance. *China National Expo*, *155(11),* 127-128.

Zhang, L. (2017). Expansion of information technology to dance education. *Art Evaluation*, 000(04), 58.

Zongnan, G. (2019). Exploration and innovation of the teaching method of Chinese folk dance. *Journal of Chinese Education, 19(11),* p. 147.

Zhu, M. (2019, December 16). The reinvention of traditional contemporary Chinese classical dance creation (1980-2010). *Australia Dance.*