



**THE EFFECT OF LEARNING MANAGEMENT USING BOPPPS TEACHING  
METHOD ON LEARNING ACHIEVEMENT AND DANCE PERFORMANCE  
OF UNIVERSITY STUDENTS**

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**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS  
FOR THE DEGREE OF MASTER OF EDUCATION  
IN CURRICULUM AND INSTRUCTION  
GRADUATE SCHOOL  
VALAYA ALONGKORN RAJABHAT UNIVERSITY  
UNDER THE ROYAL PATRONAGE PATHUM THANI  
2022**



ผลของการจัดการเรียนรู้โดยใช้วิธีการสอนแบบ BOPPS ที่มีต่อผลสัมฤทธิ์ทางการเรียนและการ  
แสดงการเต็มใจของนักศึกษาระดับมหาวิทยาลัย

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วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตร

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มหาวิทยาลัยราชภัฏวไลยอลงกรณ์ ในพระบรมราชูปถัมภ์ จังหวัดปทุมธานี

พ.ศ. 2565

**THESIS APPROVAL**  
**GRADUATE SCHOOL**  
**VALAYA ALONGKORN RAJABHAT UNIVERSITY**  
**UNDER THE ROYAL PATRONAGE PATHUM THANI**

Thesis Title     The Effect of Learning Management Using BOPPPS Teaching Method  
                          on Learning Achievement and Dance Performance of University Students


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Student ID       63U54680203

Degree           Master of Education

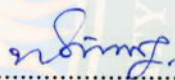
Field of Study    Curriculum and Instruction

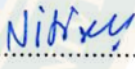
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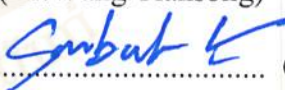
  
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Zhu Fengling. (2565). ผลของการจัดการเรียนรู้โดยใช้วิธีการสอนแบบ BOPPPS ที่มีต่อผลสัมฤทธิ์ทางการเรียนและการแสดงการเต้นรำของนักศึกษาระดับมหาวิทยาลัย. คุรุศาสตรมหาบัณฑิต สาขาวิชาหลักสูตรและการสอน. อาจารย์ที่ปรึกษา : รศ.ดร.สมบัติ คชสิทธิ์ อ.ดร.หวัง เทียนชง

### บทคัดย่อ

การวิจัยครั้งนี้เป็นการวิจัยเชิงทดลอง มีวัตถุประสงค์เพื่อ 1) เปรียบเทียบผลสัมฤทธิ์ทางการเรียนก่อนเรียนและหลังเรียนผ่านการจัดการเรียนรู้โดยการสอนด้วย BOPPPS 2) เปรียบเทียบผลการแสดงการเต้นรำหลังเรียนด้วยการจัดการเรียนรู้โดย BOPPPS และ 3) ศึกษาความพึงพอใจของนักศึกษาหลังการใช้ BOPPPS ในวิธีการสอนเพื่อการจัดการเรียนรู้ กลุ่มตัวอย่างเป็นนักศึกษาจีน จำนวน 30 คน (1 ห้องเรียน) ที่ได้มาจากการสุ่มแบบกลุ่มจาก นักศึกษาชั้นปีที่ 3 ภาควิชา Dance, Conservatory of Music, Lang Fang Normal University, Hebei Province ประเทศสาธารณรัฐประชาชนจีน เครื่องมือที่ใช้ในการวิจัยครั้งนี้ ได้แก่ 1) แผนการจัดการเรียนรู้โดยใช้วิธีการสอนแบบ BOPPPS เพื่อจัดการเรียนรู้ที่ส่งผลต่อผลสัมฤทธิ์ทางการเรียน และการแสดงการเต้นรำของนักศึกษา จำนวน 6 แผน (12 ชั่วโมง) ซึ่งตรวจสอบโดยผู้ทรงคุณวุฒิจำนวน 3 คน มีค่าดัชนีความสอดคล้อง 1.00 2) แบบทดสอบวัดผลสัมฤทธิ์ ของนักศึกษาซึ่งตรวจสอบโดยผู้ทรงคุณวุฒิจำนวน 3 คน มีค่าดัชนีความสอดคล้อง 1.00 ค่าความยากง่าย 0.60-0.70 ค่าอำนาจจำแนก มากกว่า 0.40 และค่าความเชื่อมั่น 0.97 3) แบบประเมินการแสดงการเต้นรำของนักศึกษาซึ่งตรวจสอบโดยผู้ทรงคุณวุฒิ จำนวน 3 คน มีค่าดัชนีความสอดคล้อง 1.00 ค่าความเชื่อมั่น 0.94 และ 4) แบบสอบถามความพึงพอใจของนักศึกษาซึ่งตรวจสอบโดยผู้ทรงคุณวุฒิ จำนวน 3 คน มีค่าดัชนีความสอดคล้อง 1.00 ค่าความเชื่อมั่น 0.98 ค่าสถิติที่ใช้วิเคราะห์ข้อมูลในการวิจัยครั้งนี้ ได้แก่ ค่าร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และสถิติที่ใช้สำหรับการทดสอบกลุ่มตัวอย่างที่ไม่เป็นอิสระต่อกันแบบกลุ่มตัวอย่างเดียว

ผลการวิจัยพบว่า 1) ผลการเปรียบเทียบผลสัมฤทธิ์ทางการเรียนก่อนเรียนและหลังเรียนผ่านการจัดการเรียนรู้โดยการสอนด้วย BOPPPS สูงกว่าก่อนจัดการเรียนรู้อย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 2) ผลการเปรียบเทียบการแสดงการเต้นรำหลังเรียนที่ผ่านการจัดการเรียนรู้โดย BOPPPS สูงกว่าเกณฑ์ร้อยละ 70 อย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 และ 3) ค่าเฉลี่ยความพึงพอใจของนักศึกษามหาวิทยาลัยหลังการใช้ BOPPPS ในวิธีการสอนเพื่อการจัดการเรียนรู้ที่ส่งผลต่อผลสัมฤทธิ์ทางการเรียนและการแสดงการเต้นรำของนักศึกษาระดับมหาวิทยาลัยอยู่ในระดับมากที่สุด

องค์ความรู้ที่ได้จากการวิจัยในครั้งนี้ คือ การจัดการเรียนรู้โดยใช้วิธีการสอนแบบ BOPPPS สามารถส่งเสริมผลสัมฤทธิ์ทางการเรียน และการแสดงการเต้นรำของนักศึกษาระดับมหาวิทยาลัย และเป็นรูปแบบการจัดการเรียนรู้สำหรับนักศึกษาระดับมหาวิทยาลัย ด้านความรู้และการแสดงด้านการเต้นรำ

**คำสำคัญ :** ผลสัมฤทธิ์ทางการเรียน การจัดการเรียนรู้การใช้ BOPPPS ความสามารถทางการแสดง

Zhu Fengling. (2022). The Effect of Learning Management Using BOPPPS Teaching Method on Learning Achievement and Dance Performance of University Students. Master of Education (Curriculum and Instruction). Advisors: Assoc. Prof. Dr.Sombat Kotchasit, Dr.Wang Tiansong

### ABSTRACT

The study was an experimental research. The purposes of study were to 1) compare students' learning achievement both before and after learning through learning management using the BOPPPS teaching method, 2) to compare students' dance performance after learning through learning management using the BOPPPS teaching method with the established 70% criterion, and 3) to assess the students' satisfaction with learning management using the BOPPPS teaching method. The sample included 30 third-year Chinese students (one class) from the department of Dance, Conservatory of Music, Lang Fang Normal University, Hebei Province, Republic of China. They were selected using the cluster random sampling method. The research instruments used in this research were 1) 6 lesson plans (12 hours) using learning management, the BOPPPS teaching method, which were examined by three experts with an IOC of 1.00, 2) the achievement test examined by three experts with an IOC of 1.00 with the item difficulty (p) ranged from 0.60 to 0.70, the item discriminability (r) higher than 0.40 and the reliability of 0.97, 3) the dance performance evaluation form examined by three experts with an IOC of 1.00 and the reliability of 0.94, and 4) the students' satisfaction questionnaire examined by three experts with an IOC of 1.00 with the reliability of 0.98. The statistics used to analyze the data were mean, standard deviation and One-sample t-test dependent.

The research findings were as follows: 1) the result of the t-test showed that the posttest mean scores of students' learning achievement after learning through learning management using the BOPPPS teaching method was higher than pretest scores at 0.05 level of statistical significance, 2) the result of dance performance after learning through learning management using the BOPPPS teaching method showed that the posttest score was significantly higher than 70% criterion at the 0.05 level, and 3) the result of students' satisfaction with learning management using the BOPPPS teaching method was at the highest level.

The knowledge gained from this research illustrates that learning management using BOPPPS teaching method can enhance learning achievement and dance performance for the university students. Besides, this learning management can be used as a model for teachers to equip their university students.

**Keywords:** Learning Management, BOPPPS Teaching Method, Dance Performance

## ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my advisors: Associate Professor Dr. Sombat Kotchasit and Dr. Wang Tiansong for their valuable suggestions and encouragement throughout the research and writing of this thesis.

I also would like to extend special thanks to my co-advisors, Associate Professor Dr. Lerla Othakanon, Professor Xuguang Zhou and Professor Junqiao Qin for their comments and advice. My special appreciation is owed to all the experts for their constructive comments, suggestions and corrections for my research instruments.

Finally, I would like to show my appreciation to my family for their unconditional support, encouragement and understanding during the completion of this study.

Zhu Fengling



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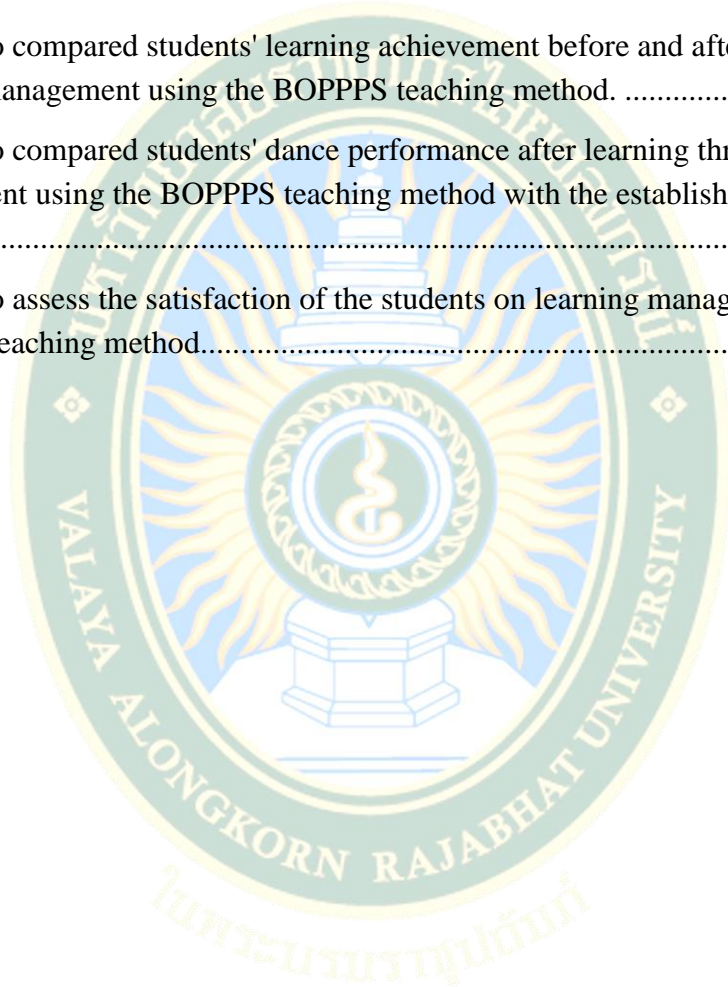
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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

As a unique form of aesthetic education, dance has irreplaceable significance and value in the construction of socialist spiritual civilization and the promotion of human's all-round development. Dance majors usually need early professional dance training as the foundation and comprehensive development during the undergraduate period from three aspects, namely knowledge, quality and ability training, finally achieving all-round development in dance skills, cultural literacy and creative thinking, etc. through the combination of professional skills and artistic accomplishment and the creation in class and artistic practice(National standard for teaching quality of music and dance in China, 2020).

Training Philosophy of Dance, as a compulsory course of dance major, plays a crucial role in the whole process of dance learning. "Philosophy of Dance" is a course combining theory and practice. It is usually offered in the third year of university. The main teaching goal is to let students master the training system of different kinds of dance, such as Chinese classical dance training system, ballet training system and modern dance training system. Students are expected to achieve accurate and infectious dance performance of different types of dance with their professional ability shaped by the scientific training system (Yang Ou, 2009).

In the teaching process, we find that there are some problems in the learning process: 1) In the traditional teaching mode, teachers play a leading role while students subsidiary, resulting in poor learning initiative of students; 2) Students only pay attention to the procedural training of basic physical ability of dance but ignore the scientific theoretical guidance of dance training system, resulting in unsatisfactory theoretical exam results of dance training courses; 3) That the students' abilities of independent thinking, creativity and comprehensive use of professional knowledge are insufficient as well as the single learning form results in the lack of appeal of the dance performance and the inability to better interpret the artistic styles of different dances (Yu Miaomiao, 2011).

BOPPPS teaching method originates from teacher skills training in Canada. It is a teaching target-oriented and student-centered teaching model. It divides the whole teaching process into six stages, namely "Bridge in, Objective or Outcome, Pre-assessment, Participatory learning, Post-assessment and Summary". To start with, arouse students' learning interest. Then inform them of the teaching goal before teaching in order to achieve the goal orientation. Next have a pre-test to form a clear picture of the students' knowledge reserves. According to the results of the test design interactive participatory teaching activities. After those teaching activities, apply post assessment to evaluate the learning progress. Finally comes the teaching summary,

which works as the introduction of the teaching session as well. The method has a clear train of thought throughout the whole process, from the shallow to the deep, from the outside to the inside, stating from interest and ending with the summary, which is closely connected and in line with the cognitive law of people. Therefore, this method is highly promoted by many university teachers who are familiar with it and carry out in their applied researches and practice in classroom teaching (Sun Jinping, 2019).

Therefore, the current dance teaching is required to improve the current teaching mode, establish a relatively complete, scientific and systematic dance teaching system, fully tap the students' learning potential, and realize the comprehensive development of students. Based on the above reasons, I choose to study the effect of BOPPPS teaching model on improving the academic performance and dance performance of students majoring in dance.

## **1.2 Research Questions**

1.2.1 How does students' learning achievement before and after learning through learning management using the BOPPPS teaching method?

1.2.2 How does students' dance performance after learning through learning management using the BOPPPS teaching method compare with the established 70% criterion?

1.2.3 How does the satisfaction of the students on learning management using the BOPPPS teaching method?

## **1.3 Research objective**

1.3.1 To compare students' learning achievement before and after learning through learning management using the BOPPPS teaching method.

1.3.2 To compare students' dance performance after learning through learning management using the BOPPPS teaching method with the established 70% criterion.

1.3.3 To assess the satisfaction of the students on learning management using the BOPPPS teaching method.

## **1.4 Research hypothesis**

1.4.1 The students' learning achievement after learning through learning management using the BOPPPS teaching method is higher than before.

1.4.2 The students' dance performance after learning through learning management using the BOPPPS teaching method is higher than the established 70% criterion.

1.4.3 The satisfaction of the students on learning management using the BOPPPS teaching method is at a high level.

## **1.5 Delimitation of the Study**

### **1.5.1 Population and sample**

The population of this study were 180 students of third-year(six classes) in the department of dance, Conservatory of Music, Lang fang Normal University, Hebei Province, China.

#### **Samples**

The samples were 30 students (one class), which are selected randomly through probability sampling techniques by the clusters random sampling method. The samples were a representative of the six classes.

### **1.5.2 Variables**

Independent variable:

Learning management using the BOPPPS teaching method consists of:

- 1) Bridge in
- 2) Objective or Outcome
- 3) Pre-assessment
- 4) Participatory learning
- 5) Post-assessment
- 6) Summary

Dependent variable:

- 1) Learning achievement
- 2) Dance performance
- 3) Satisfaction on learning management using the BOPPPS teaching

method

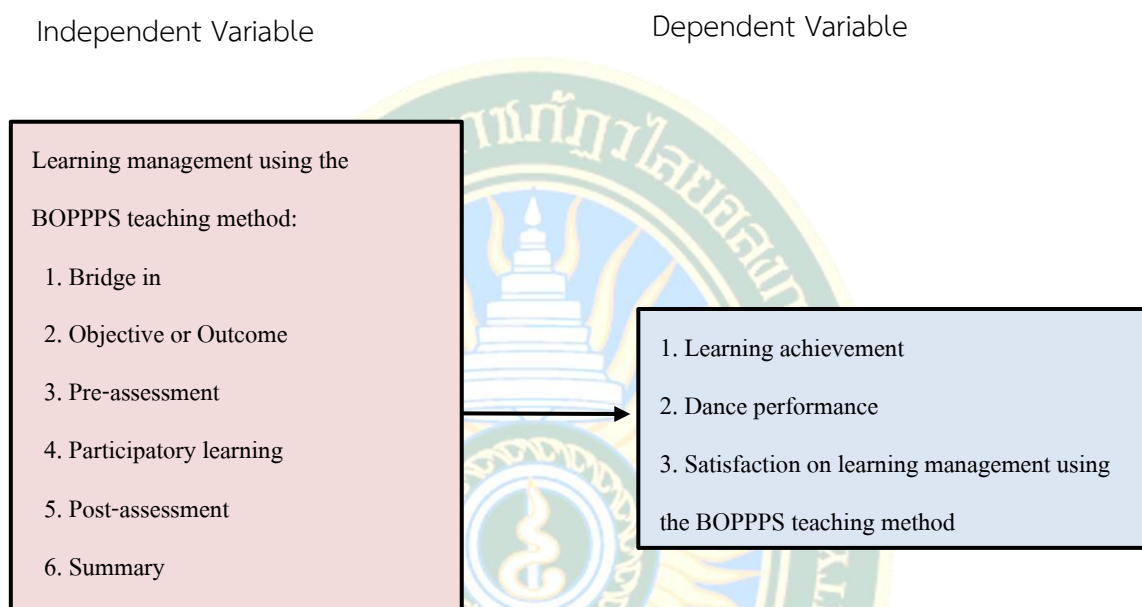
### **1.5.3 Area of content**

The main content of Training Philosophy of Dance Course includes the basic theory research of professional dance ability and basic dance ability; the principle and application of dance training adaptation, training load and training recovery; training means, training methods, training principles, training requirements, characteristics of children and women' s training and the subsidiary training of the basic ability, etc. Regarding dance strength, flexibility, speed, agility, endurance, technical ability and mental ability; Systematical answers of why, what, how and how much in terms of training.

### **1.5.4 Time duration**

October-December 2021

## 1.6 Conceptual framework



## 1.7 Operational Definition

There are cover:

Independent variable refers to: Learning through learning management using the BOPPPS teaching method.

Dependent variable refers to: 1) Learning achievement. 2) Dance performance. 3) Satisfaction on learning management using the BOPPPS teaching method

1.7.1 Learning through learning management using the BOPPPS teaching method

Learning through learning management using the BOPPPS teaching method refers to: In the teaching process of Training Philosophy of Dance course, using the BOPPPS teaching method to carry out teaching activities in a planned and organized way. The BOPPPS teaching method comprised six steps: 1) Bridge in 2) Objective or Outcome 3) Pre-assessment 4) Participatory learning 5) Post-assessment 6) Summary.

Bridge-in: Introduce the content of the class, attract the students' attention and stimulate the students' interest.

Objective/Outcome: Make the teaching objectives clear and let the students understand what they can do with the knowledge.

Pre-assessment: The function of pre-test is to understand students' interest and knowledge, adjust the difficulty and progress of the follow-up, and make the goal of the course more focused.

Participatory learning: It is aimed to make active learning and deep thinking to strengthen the impression to take the student as the center. Teachers don't do long-time single direction teaching.

Post-assessment: The purpose of post-test is to check the students' learning outcomes and whether the learning objectives are achieved.

Summary: Summary is the teacher's summary of the course teaching content and knowledge points. (Cao Danping, & Yin Xinyao, 2016)

#### 1.7.2 Learning achievement

Learning achievement refers to the learning result of Training Philosophy of Dance course. Measured by achievement test which was multiples choice test covered level of Bloom's taxonomy in cognitive domain: 1) remember 2) understand 3) apply 4) analyze.

Remember: Draw the relevant knowledge from the long-term memory.

Understand: Construct meaning from teaching information including oral, written and graphic communication forms.

Apply: Implement or utilize a program in a given situation.

Analyzing: Break pose the material into various components, determine the relationship between the components and the relationship with the overall framework. (Brumm, 2001)

#### 1.7.3 Dance performance

Dance performance is the display of dance image, which is an important link in the process of shaping dance art image. Dance performances is mainly through dancers. Measured by dance performance evaluation form which covered five performances: 1) body 2) action 3) space 4) time 5) energy

Body: The body is the tool for the dancers to express the dance and the main body when the audience watches the dance.

Action: An artistic human movement. It is divided into non-motor and motor activity.

Time: It refers to the duration of the dance performance, the temporal relationship between the movements, and the repeated rhythm patterns often used in the music, namely the beat and the free rhythm.

Space: It refers to the height and low of the dance movements, direction, place, direction, path, range changes, and the connection between the dancers and each other.

Energy: It refers to the impact force, weight sense, fluency and quality sense of the action. (Long Yinpei & Xu Erchong, 2013)

#### 1.7.4 Satisfaction on learning management using the BOPPPS teaching method

Satisfaction refers to students' feeling or opinions toward learning management using the BOPPPS teaching method, measured by 5 rating scale

questionnaire which covered: 1) strongly agree 2) agree 3) indifferent(no sure) 4) disagree 5) strongly disagree about content, teaching method, learning activities, materials, measurement and evaluation.

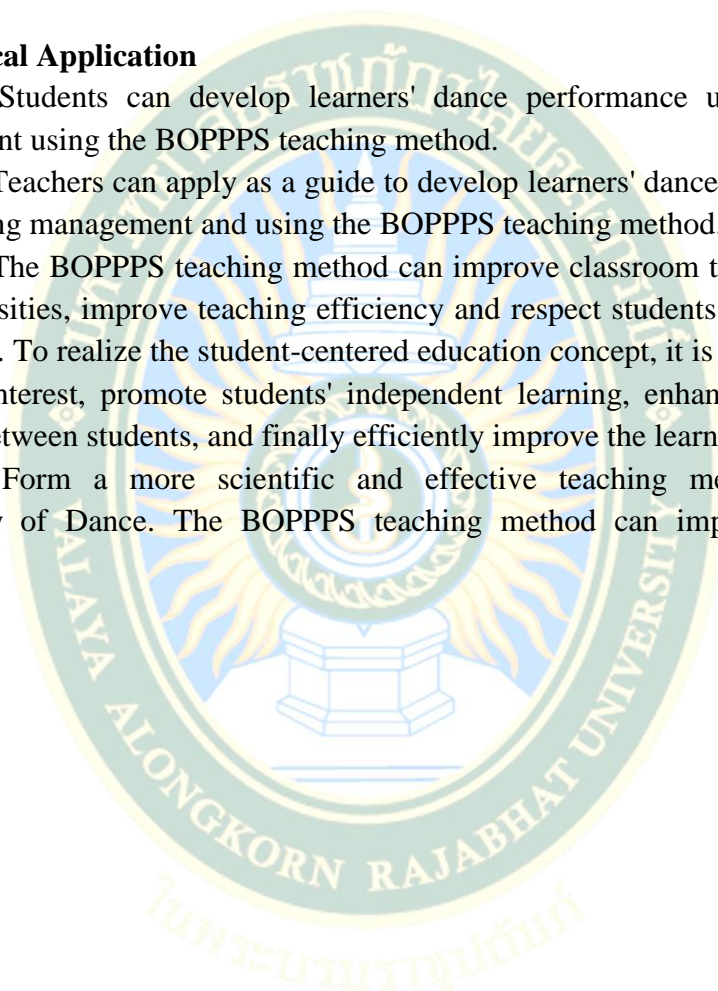
### **1.8 Practical Application**

1) Students can develop learners' dance performance using the Learning management using the BOPPPS teaching method.

2) Teachers can apply as a guide to develop learners' dance performance using the Learning management and using the BOPPPS teaching method.

3) The BOPPPS teaching method can improve classroom teaching in colleges and universities, improve teaching efficiency and respect students' dominant position in learning. To realize the student-centered education concept, it is crucial to stimulate students' interest, promote students' independent learning, enhance the cooperative learning between students, and finally efficiently improve the learning effect.

4) Form a more scientific and effective teaching method of Training Philosophy of Dance. The BOPPPS teaching method can improve the teaching quality.



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## **CHAPTER 2**

### **LITERATURE REVIEW**

The literature review in this study is related to learning management using the BOPPPS teaching method on learning achievement, dance performance and students' satisfaction on learning management using BOPPPS teaching method of the 30 students in third grade students in Conservatory of Music, Lang fang Normal University. This chapter covers the following topics:

#### **2.1 Curriculum in the Training Philosophy of Dance**

##### 2.1.1 Course description

Training Philosophy of Dance is a scientific theory to study the general law of dance training. On the basis of studying and summarizing the rich practical experience of dance training, it makes extensive use of scientific principles and methods of other related disciplines to establish its own theory and content system. (Yang Ou, 2009)

##### 2.1.2 Course objectives

- 1) Introduce scientific training concepts and scientific training methods;
- 2) Classify the content of dance training scientifically and find the internal relationship among them. Extensively absorb multidisciplinary theories and methods and modern scientific and technological achievements to improve the scientific level of dance training theory.
- 3) Summarize the common laws with universal significance from the training practice of different training courses of different majors. Constantly discover and deeply explore the unrecognized and unmastered dance training rules; Continuously enrich and improve the scientific theory and content system of dance training. (Yang Ou, 2009)

##### 2.1.3 Course content

The main content of Training Philosophy of Dance includes the basic theory of dance professional ability and dance basic ability: principles and applications of dance training adaptation, training load and training recovery, dance strength ability, flexibility ability, speed ability, sensitivity ability, endurance ability and technical ability, mental ability training means, training methods, training principles, training requirements, children and women's training characteristics and the basic ability of the auxiliary training. It systematically answers the questions of why, what, how and how much to practice. (Yang Ou, 2009)



## 2.2 BOPPPS teaching method

### 2.2.1 Theoretical background of BOPPPS teaching method

BOPPPS teaching model originates from teacher skills training in Canada. It is a teaching target-oriented and student-centered teaching model. It consists of six teaching parts: Bridge-in, Objective/Outcome, Pre-assessment, Participatory learning, Post-assessment and Summary. The name BOPPPS is made up of the first letters of the English words in these six teaching sessions. BOPPPS is an effective model for teachers to conduct teaching design and classroom teaching organization. (Cao Danping, & Yin Xinyao, 2016)

### 2.2.2 Process of BOPPPS teaching method

"BOPPPS" teaching method is based on constructivism and communicative approach, and it is famous for the effective teaching design. It is a closed-loop teaching process model that emphasizes students' participation and feedback. BOPPPS method divides the classroom teaching process into six stages (or elements):

**Bridge-in:** The purpose of the introduction is to attract students' attention and increase their interests in learning, and to let students know the topic and importance of the course. The teachers can use interesting pictures, quotes, news reports, and short videos or share the experiences.

**Objective/Outcome:** Learning objectives should be clear, appropriate, achievable and measurable from the perspective of learners, involving cognition, skills and emotion.

**Pre-assessment:** The function of pre-test is to understand students' interest and knowledge, adjust the difficulty and progress of the follow-up, and make the goal of the course more focused. Teachers can use questions and responses, positive or negative judgement, anonymous voting, open questions, experience sharing and other methods.

**Participatory learning:** Participatory learning is aimed to make active learning and deep thinking to strengthen the impression to take the student as the center. Teachers don't do long-time single direction teaching. They can adopt the model of interaction between students and teachers, such as Q & A, discussion, case study, presentations, etc. They can also use micro teaching assistant and other high-tech teaching tools to carry out the interactive quizzes to stimulate students' willingness and enthusiasm to participate in the class.

**Post-assessment:** The purpose of post-test is to check the students' learning outcomes and whether the learning objectives are achieved. It would be great if the post- test corresponds to the pre-test and the educational target level is upgraded. The teachers can use knowledge testing, application writing, operation demonstration, experience and other forms to do it.

**Summary:** Summary is the teacher's summary of the course teaching content and knowledge points. The teachers cannot only let the students summarize to further consolidate the learning effect, but also arrange extended thinking, homework and

follow-up course notice and so on, until reaching the teaching objectives of this class successfully. (Cao Danping, & Yin Xinyao, 2016)

### 2.2.3 Teacher and student role in BOPPPS teaching method

In BOPPPS teaching method, students are the main body of the class, and teachers are the organizers and guides. The teachers should scientifically design students' learning objectives. Learning objectives should be within the student's competence, relevant to the class topic, be measurable and evaluated. Teachers should make detailed arrangements for classroom interaction and enhance students' interaction and participation through thinking, cooperating and sharing to improve the efficiency of the class. As the leader of the course, students should actively participate in the interactive link, prepare before class and make a study summary after class. Good teacher-student interaction is the most important part of BOPPPS teaching method. (Cao Danping, & Yin Xinyao, 2016)

### 2.2.4 Advantage of BOPPPS teaching method

- 1) A method of organizing a set of courses to effectively design and deliver a course.
- 2) This teaching method emphasizes of students' all-round participation in learning rather than just listening to lectures, so as to improve learners' participation.
- 3) This teaching method can be applied flexibly and intuitively to meet the personalized learning needs of students.
- 4) This teaching method can timely obtain students' feedback information, adjust the follow-up teaching activities, and improve the quality of course teaching. (Cao Danping, & Yin Xinyao, 2016)

## 2.3 Learning achievement

### 2.3.1 Meaning of learning achievement

Learning achievement is a result, representing the past, is the overall evaluation of past learning activities. Academic performance is an important criterion to judge the academic level of students. Significance of learning achievement: it is of great significance to students' learning, teachers' teaching, and schools' understanding and management of teaching situation.

It helps to discover the advantages and disadvantages of students in learning as well as existing problems, timely urge students to review, constantly consolidate and deepen the mastery of knowledge, and cultivate the spirit of hard study of students.

Learning achievement reflects the teaching effect of teachers to a certain extent. It is an important way for teachers to self-check the teaching effect, obtain feedback information and constantly improve teaching work to discover the problems existing in teaching through academic performance.

Learning achievement is also one of the ways for the school teaching management department to understand the teaching quality and learning quality, and is an important content of education evaluation. (Quoted from Baidu entry, online)

### 2.3.2 How to measure learning achievement

The academic achievements mainly include Remember, Understand, Apply and Analyze.

**Remember:** It refers to Recognizing and Recalling. Recognizing is locating knowledge consistent with the current material in long-term memory, while Recalling is recall relevant knowledge from long-term memory.

**Understand:** It refers to Interpreting, Exemplifying, Classifying, Summarizing, Inferring, Comparing and Explaining. Interpreting is from one representation to another. Exemplifying is find specific examples or explain explanations of concepts or principles. Classifying is category. Summarizing is general topics or points. Inferring is logical inference from presented information. Comparing is discover consistency between two views, objects, or other analogues. Explaining is construct a systematic causal model.

**Apply:** It refers to Executing and Implementing. Executing is use a program for a familiar task. Implementing is use a program for an unfamiliar task.

**Analyze:** It refers to Differentiating, Organizing and Attributing. Differentiating is distinguishing between irrelevant and relevant or important and unimportant parts of the existing material. Organizing is identifying how the elements in a structure work. Attributing is determining opinions, bias, or implied opinions in existing material. (Brumm, 2001)

### 2.3.3 How to create learning achievement test

1. The Learning Achievement test should be constructed according to the teaching syllabus. The construction of the research results test and related documents focus on the purpose, type and content of the test. The construction of the test involves item analysis in order to clarify the item discrimination and item difficulty of the test, as well as the validity and reliability of the test.

2. Course contents are analyzed and objectives are studied by constructing a course analysis table about course objectives and content coverage. The test items consist of four types of cognitive domains: 1)Remember 2)Understand 3) Apply 4)Analyze.

3. The draft test was presented to thesis advisors for their advice on the appropriateness, precision, accuracy, ambiguity and wording of the test. After that the draft test was revised according to the thesis advisors' suggestions.

The test included 25 multiple-choice questions with 4 options per question. The learning achievement calculation : Full score is 100, 4 points for each choice question. The 100-point system is divided into four grades: excellent  $X \geq 90$ , good  $89 \leq X \leq 80$ , medium  $79 \leq X \leq 70$ , passing  $69 \leq X \leq 60$ . The exam included pre-test and post-test. The pre-test is mainly to test the knowledge mastery when the students do

not use the BOPPPS teaching method. The comparison of the test results before and after is used to realize the hypothesis that the BOPPPS teaching method can improve students' academic performance.

## **2.4 Dance performance**

### **2.4.1 Meaning of dance performance**

Dance performance is the display of dance image, which is an important link in the process of shaping dance art image. Dance performance is mainly displayed through dancers. It requires the dancers to express the thoughts and feelings of the characters through facial expressions, movements, modeling and various skills. Therefore, dancers should have a more comprehensive artistic quality, creativity and expression. The rules and characteristics of Chinese dance art performance can be summarized as follows: performing dance with love, and delivering love with dance. (Long Yinpei & Xu Erchong, 2013)

### **2.4.2 How to measure dance performance**

#### **1) Unity of technology and art**

Dancers can only use expressions, movements, modeling, various techniques and other means to show the character's thoughts and feelings. Without long and hard basic training, it is impossible to do the creative practice. The training of dance technique is different from the general physical exercise. The dance movements must conform to the thoughts, convey the emotions and shape the character so as to serve the theme contained in the work. Therefore, in dance performance, technology, as a mean, only in the process of real artistic creation can show its value.

#### **2)Unity of form and spirit**

The performance of the dancer should go through a process of going from the outside to the inside, and then from the inside to the outside to combine the inside and the outside.

In this process, performers must first learn to master the movements, gestures and other external technologies of a certain role, and then go deep into the inner world of the character, experience the psychological activities of the specific character and grasp its personality characteristics, so as to create a fleshy and full artistic image based on the inner basis of the physical movements (skills).

#### **3)The combination of the virtual and the real**

Chinese dance art absorbs traditional Chinese artistic expression techniques. In performance, hypothesis and virtuality have become common techniques. The reason why this virtual thing can affect the audience is because of the real feelings of the dancers throughout the performance. This genuine feeling inspires the audience's association and triggers their same inner experience.

#### **4)The combination of expression and action**

In addition to body movements and techniques, facial expressions also play an important role in the performing art of dance. Varied facial expressions is an important channel to enable the audience to understand the plot, experience the inner world of the characters. (Long Yinpei & Xu Erchong, 2013)

#### 2.4.3 How to create dance performance evaluation form

The dance performance evaluation form should be formulated from five aspects: body, action, time, space and energy.

**Body:** The material carrier of dance performance is "body", and the evaluation of "body" in dance performance includes physical conditions and basic abilities. Physical conditions have congenital factors, which are not elaborated here. "Basic competence" includes basic competence and technical competence. Basic abilities include: flexibility, speed, strength, agility and endurance. Technical ability refers to the unique skills and skills of different dance types.

**Action:** In the narrow sense, action refers to human action, that is, the activities of the whole body or part of the body, including single action and procedural action. Dance movement refers to the refined, organized and beautified human movement, that is, a kind of artistic human movement. Dance movements should be evaluated according to the four elements of Rudolf Laban's "kinesiology": "space", "time", "weight" and "fluency". They are mainly reflected in the integrity and normative aspects of action.

**Time Duration:** The length of a dance or part of a dance is determined in terms of duration, measured in seconds, minutes, or hours.

**Time relation:** Dancers move relative to each other, e.g. in sequence or simultaneously.

**Beat:** A repetitive rhythmic pattern is often used in music, such as 2/4 or 6/8. If the dance is choreographed to the music, movements can respond to the beat of the music, or conversely, reverse the beat of the music. The speed of the rhythm pattern is called rhythm.

**Free rhythm:** Rhythmic patterns are less predictable than beats. Dancers can perform moves without using music and rely on each other's cues.

**Space:** Refers to the change of dance movements: whether the movement position is high, medium or low, such as floor movements in modern dance.

**Direction:** It refers to the movement forward, backward, sideways, or diagonally.

**Location:** It refers to performing the action in a fixed position, or across the field.

**Orientation:** It refers to the orientation of an action.

**Path:** It refers to a variation of path, curved, straight, or otherwise.

**Range:** It refers to the amount of space occupied by the action.

**Relationships:** It refers to how dancers relate to each other.

**Attack:** The action is sharp, violent, sudden, or smooth, sustained, sustained.

Weight: Whether the movement appears to be heavy or light, attracted or repelled by gravity.

Flow: Does the movement look staccato, restricted, constricted, tense, or relaxed, fluid, free, and relaxed.

Quality: The action is taut, sharp, swinging, swinging, dangling, falling or smooth. (Wu Shiyan, 2020)

## **2.5 Satisfaction on learning management using the BOPPPS teaching method**

### **2.5.1 Meaning of students' satisfaction**

Satisfaction is a psychological state that refers to a person's subjective evaluation of the quality of a relationship. If this psychological state is measured by a number, it is called satisfaction. Student satisfaction is the entry point to improve teaching quality in an all-round way. Scientific and reasonable evaluation index of student satisfaction is an important basis to understand the real situation of student satisfaction. The student satisfaction evaluation here is the evaluation of students on the course of the training philosophy dance after using the BOPPPS teaching method. (Baidu Baike, online)

### **2.5.2 How to measure students' satisfaction**

Likert Scale, also known as five-level scale, was used in the questionnaire to test student satisfaction. When participants answer questions on such questionnaires, they specifically indicate how much they agree with the statement. It was developed by Likert, an American social psychologist, in 1932 on the basis of the original summative scale. The scale consists of a group of statements, each of which has five answers of "strongly agree", "agree", "not necessarily", "disagree" and "strongly disagree", which are recorded as 5, 4, 3, 2 and 1 respectively. The total opinion score of each respondent is the sum of his answers to each question. This total score can indicate his opinion strength or his different states on this scale.

### **2.5.3 How to create students' satisfaction questionnaire**

1. Researchers study relevant studies and literature, observe students' learning, and interview students about their learning effects to determine the content of the questionnaire.

2. Constructing a questionnaire. The questionnaire consists of two sections: Section 1 records the students' personal information. Section 2 is the five-point scale Likert questionnaire ranging from very high, high, moderate, low, and very low. This section of the questionnaire consists of 10 questions asking about students' opinions toward the instruction.

3. The draft questionnaire is presented to thesis advisors for their advice on the appropriateness, precision, accuracy, ambiguity and wording of the questionnaire. After that the draft questionnaire is revised according to the thesis advisors' suggestions.

## **2.6 Related research (about 5-10 researches, both in China and others) (should range from 2011-2021)**

### 2.6.1 Foreign research:

Y. N. (2020), Research on the Application of BOPPPS Teaching Mode in the Interactive Integration of Online and Offline Teaching in Colleges and Universities During Post-epidemic Period, 2020 Conference on Education, Language and Inter-cultural Communication (ELIC 20;20)

Y. N notes that: BOPPPS (namely “Bridge-in, Objective, Pre-assessment, Participatory Learning, Post-assessment, and Summary”) teaching mode, a new and effective teaching mode from Canada, covers six modules of bridge-in, objective, pre-assessment, participatory learning, post-assessment and summary. It fully embodies the teaching philosophy of student-centered and student-participatory learning. The teaching mode can be employed in the online and offline teaching in universities during post-epidemic period to better students' participation in real-time classroom interaction and learning enthusiasm, so as to improve the systematicness and effectiveness of classroom teaching. It also provides insight for the reform of online and offline teaching in universities, serving as an effective way to improve teaching quality. The sample is from Xi'an Translation Institute.

Y. Z. X & Y. F. (2020), ISW Training of BOPPPS Teaching Model for College Teachers in Canada and its Application in China, International Journal of Frontiers in Sociology Volume 2.0, Issue 6.0. 2020.

Y. Z. X & Y. F. notes that: Novice teachers in colleges and universities have degrees and professional knowledge, but lack of experience in teaching practice, and they have the challenge to teach effectively. BOPPPS teaching model includes six modules: bridge, objective, pre-test, participatory learning, post-assessment and summary, which can help this group of teachers to provide in improving effective teaching. In Canada, ISW applies BOPPPS to train teachers' teaching skills and it is effective, we can apply the similar training for the teachers in China by using BOPPPS as a part of pre-job training.

### 2.6.2 Domestic research:

Y. T. (2015), On Methods of Role shaping in Dance Performance, Journal of Beijing Dance Academy

Y.T. (2015) notes that: Stage art image comes from the actors' most profound understanding and vivid embodiment of artistic creativity, life, life and culture. At the moment of dance performance, the moment the actors walk on the stage is to let themselves quietly into the established scenes of the dance works, full of full performance power, which will make their thoughts, feelings, understanding and all the accumulation, into the perfect presentation of lyrical dispersion on the stage. To realize the true self on the stage, it deeply reflects the true meaning of human feelings, human nature and life. The samples were obtained from the Beijing Dance Academy.

L. K. X. (2015), Dance Performance Curriculum on the Cultivation of Dance Performance Ability, *Journal of Central University for Nationalities*

K.X. (2015) notes that: Takes the curriculum of undergraduate dance performance in the School of Dance of Central University for Nationalities as the research object, and discusses the problem of performance curriculum on the cultivation of performance ability. Through seven years of learning experience in school, learning from the theory of pedagogy to analyze the curriculum of the performance major, and then analyzed the breakthrough reforms of the training program of the performance major as reference, so as to introduce the analysis of the curriculum of the training program in 2014. First, the 2014. According to the college's curriculum, it is divided into professional main courses and professional basic courses. The main course is mainly aimed at the new courses in the main course to analyze the value of the curriculum to the cultivation of professional performance ability. Then the advantages of performance ability training are analyzed from the curriculum of professional basic training courses. Secondly, after the review of the curriculum construction of the second chapter, the author found that there are some deficiencies in the curriculum and analyzed the deficiencies. I hope to provide some basis from the adjustment direction of the undergraduate dance performance major curriculum. The samples were obtained from the Minzu University of China.

C.D.P & Y.X.Y(2016), Canada BOPPPS Teaching method and its Enlightenment for Higher Education Reform, *Research and Exploration in Laboratory*

C.D.P & Y.X.Y(2016) notes that: Canadian Teacher Skills Training (ISW) is the core of teaching goals, building six elements to ensure classroom success, including introduction, teaching objectives, investigation, participatory interactive teaching, inspection, evaluation and summary. The teaching mode is highly practical and operable, which provides teachers with a theoretical system guiding each link of classroom teaching, making the arrangement of classroom teaching more orderly and reasonable. In the practical link of BOPPPS teaching method it is necessary to carry out targeted teaching process design, and adopt various forms of teaching means to achieve the all-round participatory interactive teaching between teachers and students, and provide an effective guarantee for the realization of the curriculum objectives. According to the characteristics of BOPPPS method, in the process of teaching reform, strengthen the student-centered teaching concept, strengthen the construction of teacher training system and evaluation system, to promote the healthy development of higher education reform. The samples were from the School of Earth Science and Technology, China University of Petroleum.

G.X (2018), Application and Value of Combination Form in Basic Training Classroom of Ballet in Dance Teaching, *Journal of Shaanxi Normal University*

G.X (2018) notes that: The four aesthetic principles of "opening, stretching, straight and standing" as well as the graceful and moving figure of the dance undoubtedly do not provide the possibility for the long-term development of ballet.



From the basic movement dance with aesthetic characteristics to the invention of the great toe dance, all of them are bred through their unique aesthetic standards, and this "beauty" needs to be gradually cultivated with the help of scientific training of basic skills in the classroom. The basic training of ballet is the most perfect training system. From the targeted single movement practice combining dance movements with music in the lower grades, to the mutual integration of music and dance movements in the complex training in the middle and higher grades, the "beauty" is gradually infiltrated into the moving and quiet dance postures. Students majoring in dance need to continuously explore the training focus of basic ballet skills through highly targeted classroom combination training, improve students' physical and psychological qualities, so that they can reach the best state of ballet class practice, and explore the value of basic ballet skills in dance teaching. The samples were obtained from Shaanxi Normal University.

F.W.J (2018), Exploring the Body Rhyme Movement Principle of Chinese Classical Dance, *Journal of Beijing Dance Academy*

F.W.J notes that: The body rhyme of Chinese classical dance has been a core course throughout the teaching, performance and creation of the whole discipline since the beginning of its construction, and it is an important basis for the national attribute and aesthetic style of the discipline. Body charm as a sexual style course, contains the Chinese traditional art way of power of human body, trajectory, aesthetics and philosophy, but at the moment about the culture of body charm action capacity mechanism to trace and academic retraces the lack of systematic and scientific summary, this article on the basis of existing research, combined with the related discipline theory, in view of the body charm action capacity principle and style The theory is explored and sorted out to provide reference for the discipline construction and theory construction of Chinese classical dance. This paper attempts to analyze the theory and practice of the body rhyme movement principle of Chinese classical dance from three perspectives. The samples were obtained from the Beijing Dance Academy.

C.J.F (2019), Study on the Application of Learning Transfer Theory in Dance Teaching, *Journal of Nanchang University*

C.J.F (2019) notes that: Learning transfer is the influence of one kind of learning on another kind of learning, which is widely used in the learning of knowledge, skills and norms of behavior. The study of learning transfer is helpful to understand and discuss the essence and law of human learning, reveal the internal mechanism of the formation of ability and morality, and provide the basis for the generation and improvement of relevant learning theories. Based on the research results of learning transfer in educational psychology, this paper, from the perspective of movement skills transfer, explores the promoting role of learning transfer in the formation of dance movement skills and teaching strategies from the perspective of teaching design, and explores the internal relationship between the theory of learning

transfer and dance teaching. Further, the application of transfer law in dance teaching is analyzed in different levels, corresponding and targeted, in order to provide understanding and reflection for learners, educators and related trainers in the practice of dance teaching. The samples were from the School of Art and Design, Nanchang University.

N.X (2020), Research on Dancers' Core Literacy and Core Curriculum Construction of Performance Major, Journal of Beijing Dance Academy

N.X (2020) notes that this study mainly cites the "development of Chinese students" framework as the theoretical support of dancer core literacy, from the cultural foundation, independent development, social participation of the "humanistic spirit, scientific spirit, artistic accomplishment, professional ability, social development and social creativity. And put forward the construction of a "network" core curriculum system thinking. The samples were obtained from the Beijing Dance Academy.

L.X.M & L.C (2020), Theoretical basis and practical reflection of BOPPPS, Comparative study of cultural innovation.

L.X.M & L.C (2020) note that: "Learning-centered" and "learning results-based education" are the mainstream educational concepts in the contemporary world, and a variety of ways can design the curriculum based on the theoretical system of independent learning. In recent years, BOPPPS has been well received by education and is considered to meet practical teaching needs and convenient for training. This article tries to explore the realization path of BOPPPS by reflecting on and conducting derivative learning on the BOPPPS model, and then form some effective teaching concepts and techniques that can be put into practice. The samples were obtained from the School of Foreign Languages, Southeast University.

G.L.L (2021), Practical Exploration of College Vocal Course Based on BOPPPS Teaching Concept, Journal of Qiqihar Normal Junior College

L.L (2021) notes that: Traditional vocal music class is mainly teacher teaching, to some extent, ignores the main position of students, and has appeared problems such as "emphasizing skills over experience" and "singing over aesthetic education". Through the theoretical perspective of the six processes in the BOPPPS teaching method, taking Jiangsu folk song "Jasmine" as an example, this paper explores from the introduction, learning objectives, pre-class investigation, participatory learning, after-class inspection and summary, to further realize the "effective teaching" of vocal music class. The samples were obtained from Pingdingshan College. The samples were obtained from the Qiqihar Teachers' College.

L.Y.P & X.E.C, (2013), Introduction to Dance Art, Shanghai Music Publishing House

L.Y.P & X.E.C (2013) note that: Introduction to Dance Art explains the concept and aesthetic elements of Dance performance, and expounds the theoretical

knowledge involved in Dance Art, which provides a lot of theoretical basis for the writing of the paper.



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## CHAPTER 3

### RESEARCH METHODOLOGY

This chapter describes the research design and methodology which are used in the conduction of the study. Since this study aims to: 1) To compare students' learning achievement before and after learning through learning management using the BOPPPS teaching method. 2) To compare students' dance performance after learning through learning management using the BOPPPS teaching method with the established 70% criterion. 3) To assess the satisfaction of the students on Learning management using the BOPPPS teaching method. The description of population and samples, experimental design, research instruments, data collection, and data analysis are brought to be presented.

#### 3.1 Population and samples

##### 3.1.1 Population:

The population of this study were 180 students of third-year(six classes) in the department of dance, Conservatory of Music, Langfang Normal University, Hebei Province, China.

Specify the academic year: October-December 2021.

##### 3.1.2 Samples:

The samples were 30 students (one class), which were selected randomly through probability sampling techniques by the clusters random sampling method.

#### 3.2 Experimental design

This study used one group pre-test post-test design shown in the below figure:

Experimental group	O1	X	O2
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O1 was measurement of the learning achievement and before an experiment.

X was learning management using the BOPPPS teaching method.

O2 were measurement of the learning achievement and dance performance after an experiment.

### 3.3 Research instrument

3.3.1 In case of independent variable is instructional design

Research instruments were the tools for conducting the research to collect data. The research instruments which were used in this study were:

1. Instrument for experiment

Lesson plan: There were six lesson plans allocated with twelve hours of training philosophy of dance.

2. Instruments for collecting data

1) Learning achievement test

2) Dance performance evaluation BOPPPS form

3) Students' satisfaction on learning management using BOPPPS teaching method.

3.3.2 Construction and examining/assessing the quality of research instruments

1) Lesson plan

Constructing the lesson plan was proceeded as follows.

Step 1: Studying the construction of the lesson plan and the relevant documents. Consideration was focus on objectives, contents, instructional strategies, media and learning resources, measurement and evaluation of the lesson plan. The construction of the lesson plan involves item analysis in order to clarify the item validity of the lesson plan.

Step 2: Constructing 6 lesson plans.

Lesson plan 1: Flexibility Training in Dance

Lesson plan 2: Core Strength ability Training in Dance

Lesson plan 3: Speed Training in Dance

Lesson plan 4: Agility Training in Dance

Lesson plan 5: Endurance Training in Dance

Lesson plan 6: Characteristics and Principles of Dance Training

The teaching time of each lesson plan was 2 hours, 12 hours in total.

Step 3: The draft lesson plans were presented to thesis advisors for their advice on the appropriateness, precision, accuracy, ambiguity and wording of the lesson plans.

Step 4: Revising the lesson plans according to the experts' comments and suggestions.

Step 5: Analyzing the IOC index of the lesson plans items. The formula used to calculate the IOC index is:

$$IOC = \frac{\sum R}{N}$$

IOC means: Index of Item Objective Consistency

$\sum R$  means: Summation of experts' opinion marks

N means: A number of experts

If the Index of Item Objective Congruence (IOC) of each item of the test is higher than 0.5, which means it can be used in the test. It was found that index of Item Objective Congruence (IOC) of each item was 1.00 which indicated that the test had the validity.

## 2) Learning achievement test

Constructing learning achievement test proceeded as follows:

Step 1: The Learning Achievement test should be constructed according to the teaching syllabus. Studying the construction of the achievement test and the relevant documents. Consideration was focus on purposes, types, and contents of the test. The construction of the test involving item analysis in order to clarify the item discrimination and item difficulty of the test, as well as the validity and reliability of the test.

Step 2: Analyzing the curriculum contents and the learning objectives by constructing the analysis table of curriculum regarding the coverage of objectives and content of the curriculum. The test items consisted of four types of cognitive domain: 1) Remember 2) Understand 3) Apply 4) Analyze.

Step 3: Constructing the achievement test on “Training Philosophy of Dance”. The test consists of 25 items of multiple-choice questions, each of which has four alternatives with one correct answer.

Step 4: The draft test was presented to thesis advisors for their advice on the appropriateness, precision, accuracy, ambiguity and wording of the test. After that the draft test was revised according to the thesis advisors' suggestions. The test and the test evaluation form were offered to the three experts for the content validity check and suggestions such as the type of questions, accuracy of the test and wording. The quality of the test was considered from Index of Item Objective Congruence (IOC) obtained from the achievement test evaluation form.

Step 5: Analyzing the IOC index of the test items. The formula used to calculate the IOC index is:

$$IOC = \frac{\sum R}{N}$$

IOC means: Index of Item Objective Consistency

$\sum R$  means: Summation of experts' opinion marks

N means: A number of experts

If the Index of Item Objective Congruence (IOC) of each item of the test is higher than 0.5 that means it can be used in the test. The result of analyzing the IOC index showed that all test items were appropriate and could be used in the test.

It was found that index of Item Objective Congruence (IOC) of each item was 1.00 that mean the test had the validity.

Step 6: Revising the test according to the experts' comments and suggestions.

Step 7: The research tried out the draft test to 30 students who had learned the content previous semester.

Step 8: The test was paper, and the data results were calculated by SPSS. Each item of the test was analyzed to find out the item difficulty (p) and item discriminability (r) including reliability. Item difficulty (p) should range from 0.20-0.80 and item discriminability (r) should be more than 0.20. The reliability of the test was computed using the formula of Kuder and Richardson formulas 20 and should be more than 0.7 (Kuder; & Richardson. 1939 : 681-687).

After calculating the reliability, item difficulty (p) and item discriminability (r) through test analysis program, it was found that the item difficulty (p) of the test was range from 0.60 to 0.70; item discriminability (r) was more than 0.40; the reliability was 0.97. So, the test was appropriate for collecting data.

### 3) Dance performance evaluation form

Constructing dance performance evaluation form proceeded as follows:

Step 1: The evaluation form of dance performance should be constructed according to the teaching syllabus. The main consideration focused on the purpose and content of the test. The evaluation form should be clear about content validity.

Step 2: Analyze the curriculum contents and the learning objectives by constructing the analysis table of curriculum regarding the coverage of objectives and content of the curriculum. The test items consisted of five elements of dance performance: 1) Body 2) Action 3) Time 4) Space 5) Energy.

Step 3: The evaluation form included five levels: Excellent, Good, Medium Good, Pass, No Pass. (Rubric Score Criteria)

Step 4: The draft test was presented to thesis advisors for their advice on the appropriateness, precision, accuracy, ambiguity and wording of the test. After that the draft test was revised according to the thesis advisors' suggestions. The test and the test evaluation form were offered to the three experts for the content validity check and suggestions such as the type of questions, accuracy of the test and wording.

Step 5: Revise the test according to the experts' comments and suggestions.

Step 6: Analyze the IOC index of the test items. The formula used to calculate the IOC index is:

$$IOC = \frac{\sum R}{N}$$

IOC means: Index of Item Objective Consistency

$\sum R$  means: Summation of experts' opinion marks

N means: A number of experts

If the Index of Item Objective Congruence (IOC) of each item of the test is higher than 0.5 that means it can be used in the test. It was found that index of Item Objective Congruence (IOC) of each item was 1.00 that mean the test had the validity.

Step 7: The dance performance was carried out by live display. Every six students forms a group, up to a total of five groups. Three teachers were invited to score on the spot. The average score was calculated according to the total scores of the three teachers, and the data results were calculated by SPSS. Each item of the dance performance was analyzed to find out the reliability of the evaluation form by using Pearson's Product-moment Correlation to show inter-rater correlation. After that calculating the reliability was 0.95. So, the test was appropriate for collecting data.

4) Students' satisfaction on “learning management using BOPPPS teaching method”.

The following were the steps of constructing the questionnaires:

Step 1: Researchers studied relevant studies and literature, observed students' learning, and interviewed students about their learning effects to determine the content of the questionnaire.

Step 2: Construct a questionnaire. The questionnaire consisted of two sections: Section 1 recorded the students' personal information. Section 2 was the five-point scale Likert Questionnaire ranging from very high, high, moderate, low, and very low. This section of the questionnaire consisted of 10 questions asking about students' opinions toward the instruction.

Step 3: The draft questionnaire was presented to thesis advisors for their advice on the appropriateness, precision, accuracy, ambiguity and wording of the questionnaire. After that the draft questionnaire was revised according to the thesis advisors' suggestions. The evaluation form were offered to the three experts for the content validity check and suggestions.

Step 4: Revise the questionnaire according to the experts' comments and suggestions.

Step 5: Analyze the IOC index of the questionnaire items. The formula used to calculate the IOC index is:

$$IOC = \frac{\sum R}{N}$$

IOC means: Index of Item Objective Consistency

$\sum R$  means: Summation of experts' opinion marks

N means: A number of experts

If the Index of Item Objective Congruence (IOC) of each item of the questionnaire is higher than 0.5 that means it can be used in the questionnaire. It was found that index of Item Objective Congruence (IOC) of each item was 1.00, which indicated the test had the validity.



Step 6: The questionnaire was distributed online, open for 1 day, with a total of 30 participating students, and data was analyzed by SPSS. The reliability of the test was computed using the Formula of Alpha Coefficient. The value ranges from 0 to 1. An  $\alpha$  value between 0 and 1 indicates that the set of questions fully matches the characteristics of ruler. The reliability coefficient value was 0.98, greater than 0.9, thus indicating that the reliability quality of the study data was very high. The test was appropriate for collecting data. (Alpha. 1951).

### **3.4 Data collection**

- 1) The samples were pretested for learning achievement before teaching according to the lesson plans.
- 2) The samples were taught according to the lesson plans using learning management using the BOPPPS teaching method in the classroom and observed dance performance of students.
- 3) After teaching according to the lesson plans, the samples were post-tested for learning achievement, the dance performance, and answer students' satisfaction on the learning activity questionnaire.

### **3.5 Data analysis**

- 1) To compare students' learning achievement before and after learning through learning management using the BOPPPS teaching method using a t-test for dependent samples.
- 2) To compare students' dance performance after learning through learning management using the BOPPPS teaching method with the established 70% criterion using a t-test for one sample.
- 3) To assess the students' satisfaction with learning management using the BOPPPS teaching method by using the arithmetic mean and standard deviation.

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## CHAPTER 4

### RESULTS

This chapter describes the research results. Since this study aims to:

1) To compare students' learning achievement before and after learning through learning management using the BOPPPS teaching method.

2) To compare students' dance performance after learning through learning management using the BOPPPS teaching method with the established 70% criterion.

3) To assess the satisfaction of the students on learning management using the BOPPPS teaching method.

The research tools were : Lesson plans; Learning achievement test; Dance performance evaluation BOPPPS form and students' satisfaction on learning management using BOPPPS teaching method.

Statistical symbols

Statistical symbols	Description
$\bar{X}$	Sample mean
S.D.	Standard deviation
t	T-test
p	Statistically Significant

Section 1 Result of comparing learning achievement using the BOPPPS Teaching Method before and after receiving the students' learning achievement by using t-test for dependent sample.

**Table 1** To compared students' learning achievement before and after learning through learning management using the BOPPPS teaching method.

Group	N	Pretest		Posttest		t	p
		$\bar{X}$	S.D.	$\bar{X}$	S.D.		
Experimental group	30	77.33	10.03	86.40	8.95	15.817*	.000

$P^* < 0.5$

From the results of t-test (dependent) analysis, it was found out that:

Students had learning achievement score after learning management using the BOPPPS teaching method (post-test)  $\bar{X}=86.40$  S.D.=8.95 higher than before learning through the learning management using the BOPPPS teaching method (pre-test)  $\bar{X}=77.33$ , S.D.=10.03 at .05 statistical significant level ( $t_{29} = 15.817$ ,  $p < 0.05$ ).

Section 2 Result of comparing dance performance using the BOPPPS teaching method with the determined criteria set at the students' dance performance 70% by using t-test for one sample.

**Table 2** To compared students' dance performance after learning through learning management using the BOPPPS teaching method with the established 70% criterion.

Group	N	Full score	Criteria score	$\bar{X}$	S.D.	t	p
Experimental group	30	100	70	84.27	8.12	42.7*	.000

$P^* < 0.5$

From the results of t-test (dependent) analysis, we can say that:

Students had dance performance ability after using the BOPPPS teaching method was  $\bar{X}=84.27$ ,  $S.D.=8.12$  which was statistically higher than the criterion of 70% at the .05 level of statistical significance.

Section 3 Result of the satisfaction of the students on learning management using the BOPPPS teaching method.

**Table 3** To assess the satisfaction of the students on learning management using BOPPPS teaching method.

Item	Question	Numbers of samples	Mean	S.D.	Levels of satisfaction
course content	Were you satisfied with the overall arrangement of the teaching plan and course?	30	4.93	0.254	highest
teaching form	Were you satisfied with the teaching method of BOPPPS?	30	4.97	0.183	highest
	Were you satisfied with the information teaching means?	30	4.93	0.254	highest
teaching activities	Were you satisfied with the participative learning part of the BOPPPS teaching method?	30	4.9	0.403	highest
	Were you satisfied with the classroom atmosphere of this teaching method?	30	4.9	0.305	highest
testing	Were you satisfied with your final grades?	30	4.87	0.346	highest
	Were you satisfied with your dance performance ability after adopting BOPPPS teaching method?	30	4.9	0.305	highest

**Table 3 (Cont.)**

Item	Question	Numbers of samples□	Mean	S.D.	Levels of satisfaction
Teaching evaluation	Were you satisfied with the assessment method of this teaching method?	30	4.9	0.305	highest
	Were you satisfied with your changing attitude after using this method of dance learning?	30	4.9	0.305	highest
	Were you satisfied with the learning effect of BOPPPS teaching method in the Training Philosophy Dance?	30	4.9	0.305	highest

From the analysis, it was found out that:

Students' satisfaction with the course content was  $\bar{X}=4.93$ , S.D.=0.254. Students' satisfaction with the teaching form was  $\bar{X}=4.95$ , S.D.=0.219. Students' satisfaction with the teaching activities was  $\bar{X}=4.9$ , S.D.=0.354. Students' satisfaction with the teaching test was  $\bar{X}=4.885$ , S.D.=0.326. Students' satisfaction with the teaching evaluation was  $\bar{X}=4.9$ , S.D.=0.305. The sample had high satisfaction with the using of the BOPPPS method.

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## **CHAPTER 5**

### **DISCUSSION**

This research aimed to: 1) To compared students' learning achievement before and after learning through learning management using the BOPPPS Teaching Method. 2) To compared students' dance performance after learning through learning management using the BOPPPS Teaching Method with the established 70% criterion. 3) To assessed the satisfaction of the students on Learning management using the BOPPPS Teaching Method.

The population of this study were 180 students of third-year(six classes) in the Department of Dance, Conservatory of Music, Lang fang Normal University, Hebei Province, China. The samples were 30 students (one class), which were selected randomly through probability sampling techniques by the clusters random sampling method. The academic year: October-December 2021.

The experimental design was used one group pretest post-test design.

The research instruments were: Lesson plans; Learning achievement test; Dance performance evaluation BOPPPS form and students' satisfaction on learning management using BOPPPS teaching method. The statistics used to analyze the quantitative data were percentage, mean, standard deviation, t-test (dependent) analysis.

The following were the stages of data collection: The samples were pre-test for learning achievement before teaching according to the lesson plans. The samples were taught according to the lesson plans using learning management using the BOPPPS teaching method in the classroom and measured dance performance of students. After teaching according to the lesson plans, the samples were post-test for learning achievement and dance performance.

The methods of developing the research tools were discussed as follows:

1. The learning achievement test: There were 25 choice questions. There were four options for each choice question, including single and multiple multiple-choice questions. The contents included five aspects: flexibility training in dance, core strength ability training in dance, speed training in dance, agility training in dance, endurance training in dance.

2. The dance performance evaluation form included Body, action, Time, Space and Energy. The final score was an average of five points for Body, Action, Time, and Space and Energy. The score was divided into five levels: Excellent, Good, Medium Good, Pass and no Pass.

3. The Students' satisfaction on learning activities questionnaire: 1) Basic information of the participants; 2) Satisfaction with the use of the BOPPPS teaching

method for classroom teaching; 3) Satisfaction with their academic performance and dance performance ability after using the BOPPPS teaching method.

### 5.1 Research conclusion

1. To compare students' learning achievement before and after learning through learning management using the BOPPPS teaching method.

Students have Training Philosophy of Dance learning achievement score after learning management using the BOPPPS teaching method (post-test)  $\bar{X}=86.40$  S.D.=8.95 higher than before learning through the learning management using the BOPPPS teaching method (pre-test)  $\bar{X}=77.33$ , S.D.=10.03 at .05 statistical significant level ( $t_{29} = 15.817$ ,  $p < 0.05$ ).

2. To compare students' dance performance after learning through learning management using the BOPPPS teaching method with the established 70% criterion.

Students have dance performance ability after using the BOPPPS teaching method was  $\bar{X}=84.27$ , S.D.=8.12 which was statistically higher than the criterion of 70% at the .05 level of statistical significance.

3. To assess the satisfaction of the students on Learning management using the BOPPPS teaching method.

Students' average score of using of the BOPPPS teaching method satisfaction were between 4.87 and 4.97. The sample had high satisfaction with the use of the BOPPPS method.

### 5.2 Research discussion

The following points based on the research results have been discussed:

1. Scientific and effective teaching design is an important link to improve students' performance and dance performance. According to the requirements of curriculum standards and the characteristics of teaching objects, teaching design is about the teaching elements of orderly arrangement, determining the appropriate teaching program ideas and plans. It generally includes teaching objectives, teaching key and difficult points, teaching methods, teaching steps and time allocation. Gagne once defined in the *Teaching Design Principle* (1988) as: " Teaching design is a process of systematic (systematic) planning of the teaching system. The teaching system itself is a learning-friendly arrangement for resources and procedures. Any organization whose purpose is to develop human talents can be included in the teaching system." The purpose of teaching design is to improve the teaching efficiency and teaching quality, so that students can learn more knowledge in the unit of time, more greatly improve students' ability in all aspects, so that students can obtain good development. The teaching design should follow the following principles:

systematic principle, procedural principle, feasibility principle and feedback principle. Therefore, my teaching design should be designed according to this principle:

1)The teaching design should start from "why to learn" and determine students' learning needs and teaching purposes;

2)According to the teaching purpose, what specific teaching content and teaching objectives should be set to achieve the teaching purpose, so as to meet the students' learning needs, that is, to determine "what to learn";

3)In order to achieve specific teaching objectives and make students master the required teaching content, what strategies should be adopted, that is, "how to learn";

4)The teaching effect should be comprehensively evaluated, and the above links should be modified according to the evaluation results to ensure that students' learning and achieve successful teaching.

(Xie Limin, 2007)

3. The improvement of sample academic performance and dance performance is due to the fact that student initiative can be fully developed in the six steps of the BOPPPS teaching method. BOPPPS teaching model originated from teacher skills training in Canada. It is a teaching target-oriented and student-centered teaching model. It consists of six teaching parts: Bridge-in, objective, pre-assessment, participatory learning, post-assessment and summary. Bridge-in: The teacher can start the class, use pictures, videos, stories, questions, hot topics and other ways to import. Introduction must be vivid and interesting, in order to attract students' attention, arouse students' curiosity and interest in learning. Objective / Outcome: With the board, PPT to present students specific and clear learning objectives, learning objectives should include cognitive, emotion and skills, from the perspective of students to set clear, appropriate, attainable, measurable learning objectives, and let students know what goals to achieve in this lesson. That is, learning objectives should be accurately described with verbs, such as "statement", "analysis", "summary", "evaluation", "design", etc.; learning objectives should be related to classroom topics; learning objectives should be within the student ability; learning objectives should be measurable and the completion can be evaluated.

Pre-assessment: Before explaining the new knowledge of this class, students' questions, quiz, anonymous voting, group discussion and other ways will be interested in the topic and prepare knowledge, so as to adjust the depth and progress of the follow-up teaching content, so that the goal of the course is more focused. This link is called Pre-assessment.

Participatory learning: after explaining the concept, key, difficult and other main knowledge points, let the students use personal report, group discussion, case study, role play, experiment, storytelling, solitaire and other interesting ways to participate in learning activities, to deepen the students' understanding of the content and impression, improve students' interest in learning. Practice shows that the effect



of students' active participatory learning is far better than that of passive learning. Participatory learning can also cultivate students' language expression ability, communication ability and cooperation ability.

Post-assessment: The purpose of post test is to accept the learning results. After participatory learning, by answering questions, quizzes, doing exercises, operation demonstration, reporting and other ways to test how the students master this class, whether achieved the learning goals, teaching effect. This link is called a Post-assessment. Post-test and pre-test correspond to, deepen the effect is better.

Summary : Finally, summarize what you have learned in this class to deepen the students' impression. Teachers can summarize and highlight the knowledge points, key points, difficult points and learning objectives of this class. You can also let the students first summarize, many people to supplement, and then the teacher to emphasize the key points, difficult points, so that the effect is better. After summary, assign homework so that students can extend their study and consolidate the content learned. Therefore, when I used the BOPPPS teaching method, I design according to the above principles: In the bridge-in section, we used many interesting content and various forms for course import, students had developed a strong interest in learning about the course content; In the objective section, set the learning goals that students can achieve, greatly enhanced the students' self-confidence. In the participatory learning section, a favorite part of the students, students could shared, showed, and discussed, give full played to their own subjective initiative; Through the pre-test and the post-test, teachers could accurately understand how students completed their course goals, timely improvement, improve the teaching effect. This was consistent with scholars saying that the "BOPPPS " is an " effective ", " efficient " and " beneficial " teaching method that can promote students' active participation in classroom learning. (Zhang Xiaoyun, 2020), (Zhang Jianxun, & Zhulin, 2016)

4. The very important reason for the improvement of students' comprehensive ability is that students participate in teaching. "Participatory teaching" is learning according to the actual needs and expectations of students, with subjectivity as the core and self-consciousness and selectivity. In the teaching process, teachers treat students sincerely, so that they can truly feel they are the main body of learning, so as to experience the joy of learning and the joy of exploring knowledge together with their teachers and classmates. It is a complete subversion of the previous "cramming" teaching method, and has a milestone significance. The theoretical basis of the participatory teaching method is mainly the theory of the relationship between internal motivation and external motivation in psychology and the theory of expectation. This method which is a flexible and intuitive teaching method is student-centered. This method encourages learners to actively participate in the teaching process, becomes an active component, strengthens information communication and learning feedback, and enables learners to deeply understand and master knowledge, and can put this knowledge into practice. Therefore, in the

BOPPPS teaching method, it pays great attention to "independent learning design" and "collaborative learning situation design", which fully reflects the three elements surrounding students' learning: exerting students' initiative, externalizing knowledge and realizing self-feedback. The design includes the following contents:

- (1) The teacher identifies the initial question that might lead to discussion;
- (2) The teacher determines the internal discussion of the problem;
- (3) The teacher guides the discussion through questions;
- (4) The teacher immediately evaluates the students' performance in the discussion process. (Xie Zehui, 2009)

### **5.3 Recommendation**

#### **5.3.1 Recommendation for implication**

1) The BOPPPS teaching method can be widely used in other dance courses. When BOPPPS teaching method is recommended, the connecting part should be creative, interesting and stimulate learning interest. Objectives should be set scientifically and measurably to determine whether students are meeting their learning goals. In participatory learning, learning tasks should be arranged in advance to let students take the initiative to participate in learning activities and improve learning efficiency. After class, it is necessary to summarize, reflect in time in order to continuously improve the teaching effect. For teachers who will use the BOPPPS teaching method, they should carefully analyze the characteristics of the courses taught, and evaluate the effectiveness of using the method, and how to design the teaching plan according to the BOPPPS teaching method.

2) The BOPPPS teaching method can be used for the teaching ability training of art teachers. Through BOPPPS teaching method, it can help teachers to develop more teaching plans in line with students' ability, and master more scientific teaching methods and means, so as to improve the teaching level of teachers.

3) The BOPPPS teaching method can be used as a means for students to self-study themselves. Through preparation before class, class sharing and review after class, students not only improve their learning ability, but also develop the learning habit of independent thinking and actively participating in learning.

Through research, it is found that BOPPPS teaching method can fully tap students' learning potential and realize the comprehensive development of dance skills, cultural literacy and creative thinking, so as to realize the learning objectives of Training Philosophy of Dance.

#### **5.3.2 Recommendation for further research**

1) The main contents of this study is : The Effect of Learning Management using BOPPPS Teaching Method

on Learning Achievement and Dance Performance of University Students. It is a holistic study of the BOPPPS teaching method, with no specialized research on the

six links. In the future, specialized research can be carried out on each link, especially on the student participatory teaching link.

2) This study mainly improves the students' academic performance and dance performance. Dance ability also includes creative ability, we can try to use the BOPPPS teaching method in the choreography courses in the future.

3) This research experiment is mainly applied through offline teaching, and can be studied online using BOPPPS teaching methods in the future.



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## REFERENCES

- D.P. & Y.X.Y. (2016). *Canada BOPPPS Teaching Model and its Enlightenment for Higher Education Reform: Research and Exploration in Laboratory*.
- Best, J. W. (1981). *Education*, 4th ed. New Jersey: Prentice-Hall Inc, P. 182.
- C. J. F. (2019). Study on the Application of Learning Transfer Theory in Dance Teaching. *Journal of Nanchang University*.
- C. Y. G. (2018). Comparative Analysis of Lower Limb Strength Training of Dancers in Chinese Classical Dance and Ballet. *Journal of Wuhan Conservatory of Music*.
- D. T. J. N. (2021). *Brief Analysis on how to improve students' dance performance in dance teaching*. Chinese National Expo.
- D. P. & Y. X. Y. (2016). Canada BOPPPS Teaching Model and its Enlightenment for Higher Education Reform. Research and Exploration in Laboratory.
- F. W. J. (2018). Exploration of Body Rhythm and Movement Principle of Chinese Classical Dance. *Journal of Beijing Dance Academy*.
- G. X. (2018). Application and Value of Combination Form in Basic Training Classroom of Ballet in Dance Teaching. *Journal of Shaanxi Normal University*.
- K. C. & G. S. (2021). Dances and Affordances: The Relationship between Dance Training and Conceptual Problem-Solving. *Journal of Aesthetic Education*. 55(1), 35-55.
- L. H. M. (2020). Research on Development Path of Chinese Classical Dance Foundation Training. *Journal of Shenyang Normal University*.
- L. L. (2016). Design and Implementation of Chinese Classical Dance Digital Teaching System. *Journal of Beijing University of Technology*.
- L. L. (2021). Practical Exploration of College Vocal Course Based on BOPPPS Teaching Concept. *Journal of Qiqihar Normal Junior College*
- L. X. M. & L. C. (2020). *Theoretical basis and practical reflection of BOPPS teaching method*. Comparative study of cultural innovation.
- L. Y. Y. (2020). Application of "Ideological Teaching" in Chinese Classical Dance Body and Rhythm Training -- Taking "Yunshou" as an Example. *Journal of Central University for Nationalities*.
- L. Z. H. (2018). Origin and Development of Aesthetic Characteristics of Chinese Classical Dance. *Journal of Shaanxi Normal University*.
- L. K. X. (2015). Dance Performance Curriculum on the Cultivation of Dance Performance Ability. *Journal of Central University for Nationalities*.
- N. X. (2020). Research on Dancers' Core Literacy and Core Curriculum Construction of Performance Major. *Journal of Beijing Dance Academy*
- P. Y. (2020). *Flip Classroom in Dance Performance*.
- Q. Y. & Z. X. D. (2021). Research and Practice of Mixed Teaching Based on BOPPPS Mode. *Journal of Wuhan Vocational and Technical College*.
- W. J. Y. M. (2019). The Source of Strength, the Method of Strength -- Study on the Strength of Chinese Classical Dance. *Journal of Beijing Dance Academy*.

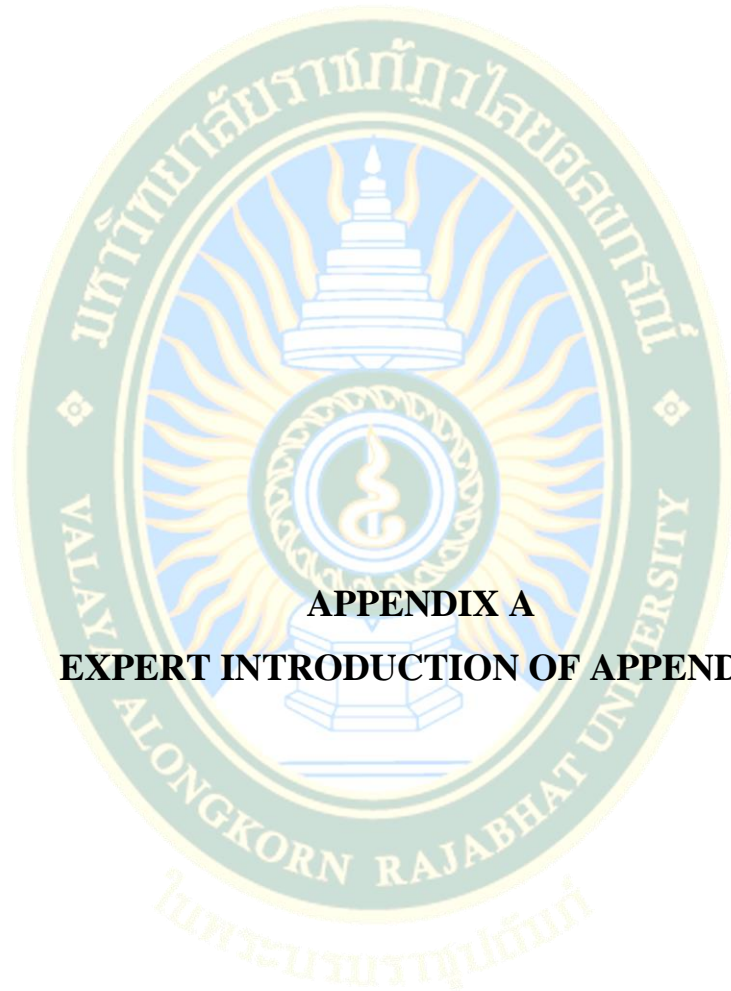
- W. R. (2015). Scientific Theory and Development of Dance Training System - Exploration on Dance Auxiliary Training. *Journal of Beijing Dance Academy*.
- W. Y. R. (2021). *Instructional Design Based on "Internet + BOPPS" Hybrid Teaching Model*. Computer Knowledge and Technology
- X. F. F. (2021). *Discussion on the Importance of Body Rhyme in Chinese Classica*. Dance Teaching and Artistic Evaluation.
- X. L. M. (2016). *Guidance for the application of teaching design*. East China Normal University Press.
- X. M. J. & Q. S. F. (2021). *Analysis on Effective Classroom Teaching of BOPPPS Teaching Model*. Industry and Information Education.
- X. W. & Y. H. L. (2020). *Construction of Online and Offline Mixed Classroom Teaching Model Based on BOPPS Model*. Textile and Clothing Education
- X. Z. H. (2009). *Participatory teaching*. Southwestern Normal University.
- Y. F. & Y. T. M. (2021). BOPPPS teaching module. *Journal of Liaoning University of Technology*.
- Y. X. X. (2019). Design Research on SPOC Teaching Activities Based on BOPPPS Teaching Mode. *Journal of Hebei University*
- Y. Y. N. (2015). *Dance Training Methods*. Theatre Home.
- Y.T. (2015). On Methods of Role shaping in Dance Performance. *Journal of Beijing Dance Academy*
- Z. D. (2019). *Aesthetic and Emotion Expression Research of Chinese Classical Dance*. Wuhan Conservatory of Music Technique.
- Z. J. X. & Z. L. (2016). *Effective Classroom Teaching Design Based on the BOPPPS Modelx*. Vocational and Technical Education.
- Z. J. Y. (2019). Innovation Research of Chinese Folk Dance from the Perspective of New Media Dance Art. *Journal of Nanchang University*.
- Z. X. Y. (2020). *A Brief Introduction to the BOPPPS teaching model*, Yan' an daily

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**APPENDICES**

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**APPENDIX A**  
**EXPERT INTRODUCTION OF APPENDIX**

**GRAD VRU**

**Expert 1: Asst. Prof. Dr. Lerlak Othakanon****Education Background:**

Ed.D. (Curriculum and Instruction) Burapha University, 2010

M.Sc. (Computer Science Education) King Mongkut's Institute of Technology  
Ladkrabang, 2005

B.Ed. (Computer Science) Kasetsart University, 2002

Experiences

2004 – 2013

Lecturer of Information Technology Program, Science  
Technology Faculty at Valaya Alongkorn Rajabhat University under the Royal  
Patronage,

Bangkok Center

2013 - present

Lecturer of Graduate Diploma Profession Program, Education  
Faculty at Valaya Alongkorn Rajabhat University under the Royal Patronage

2017 – present

Vice Director of Demonstration School of Valaya Alongkorn  
Rajabhat University under the Royal Patronage

Publications (3 publications 5 Years):

1. Lerlak Othakanon. University 4.0: Productivity Education. Journal of Graduate  
Studies Valaya Alongkorn Rajabhat University. Vol. 12 No. 3 September – December  
2018.

249 – 265.

2. Lerlak Othakanon, Sangdao Wattanaskulkiat, Sasithorn Chanthamaruk and  
Danucha

Saleewong. The research and development to promote quality of life with group  
relationship for community leaders and parents in sakaew province: a case study of  
tambon

ta phraya. Journal of Educational Measurement. Vol. 36 No. 99 January– June 2019.3.

Yuwarat Naktamna, Naree Kuharueangrong, and Lerlak Othakanon. Creative music  
club activity on the concept of gpas 5 steps to develop creative thinking skills for  
students

in secondary school. Valaya Alongkorn Review Vol. 10 No. 3 (2020): September -  
December

2020.



**Expert 2: Professor Xuguang Zhou**

music educator, baritone, composer, professor and former dean of Conservatory of Music of LangFang Normal University. Distinguished Master and Graduate Tutor of Hebei Normal University, Outstanding Teacher of Hebei province. Member of Chinese Musicians' Association, Vice President of Hebei New Musicians' Association, Committee Member of Hebei Musicians' Association, President of LangFang Musicians' Association.

- 1)Published more than 30 musical academic papers in national and provincial professional journals.
- 2)Composed and published nearly 100 music works.
- 3)Obtained more than 20 national and provincial first, second and third prizes.
- 4)Guided students' performance and obtained 2 second prizes by Ministry of Education and more than 30 Provincial first, second and third prizes.
- 5)Participated in 1 national research programme; Took charge of 4 provincial and 3 municipal research projects.
- 6)Chief editor of 1 set ( over 10 books) of Music Teaching Material for national colleges and universities in the eleventh Five Year Plan.



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**Expert 3: Professor Junqiao Qin**

Doctor of Education, Associate Professor, Director of Office of Academic Research of LangFang Normal University, Candidate of '333 Talent Project' of Hebei Province. In charge of 5 research projects: 1 research of Humanity & Social Science by Ministry of Education. 2 researches of Provincial Social Science Funds. 1 research of Provincial Education Reform. 1 research of Provincial Outstanding Talented Youth

- 2) Published 4 academic monographs of his Major and 3 high-level papers
- 3) Obtained the second prize of Social Science Outstanding Achievement Award of Hebei Province and the title of the First Person of Accomplishment.



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**APPENDIX B**  
**THE RESEARCH INSTRUMENTS**

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## Lesson plan

### Lesson plan 1

Course / Subject: Training Philosophy of Dance

Instructional Topic: Flexibility training in dance

Class Level: The third grade

Time for Instructional: Two hours

Instructor's name: Zhu Fengling

#### 1. Objectives

1.1 Students can explain concepts of flexibility, classification of flexibility and significance of flexibility training.

1.2 Students can show the means and methods of dance flexibility training through actual movement exercises.

1.3 Students can present the mind map about the basic principles and main characteristics of dance flexibility training.

1.4 Students can design a preliminary plan suitable for children's flexibility training.

#### 2. Content

concepts of flexibility, classification of flexibility and significance of flexibility training, means of flexibility, Method of flexibility.

Concepts of flexibility: It refers to the range of movement of the dancer's body in different dimensions and the stretching ability and elasticity of soft tissues such as muscles, tendons and ligaments across the joints.

Classification of flexibility: general flexibility ability and specialized flexibility ability, static flexibility ability and dynamic flexibility ability, active flexibility ability and passive ability.

Significance of flexibility training: flexibility ability is the most important part of the dancer's physical ability, dancers must have good physical flexibility ability to better complete the dance performance.

Means of flexibility: practice with external tools, practice with external strength, practice with using their own strength.

Method of flexibility: static stretching force, dynamic stretching method

#### 3. Instructional Strategies (teaching methods)

The teaching method is BOPPPS teaching method, including six parts:

##### 3.1 Bridge-in:

Play the video of Chinese classical dance technique, and attract the students' attention by appreciating the difficult technique movements. Let the students think about how to realize the exquisite technique. This leads to the learning objectives and tasks of this course.

##### 3.2 objective:

The teacher introduces the teaching objectives of this class to the students:

- 1) Students can explain concepts of flexibility, classification of flexibility and significance of flexibility training.
- 2) Students can show the means and methods of dance flexibility training through actual movement exercises.
- 3) Students can present the mind map about the basic principles and main characteristics of dance flexibility training.
- 4) Students can design a preliminary plan suitable for children's flexibility training.

### 3.3 Pre-assessment:

Through students' sharing of their own experience in the process of flexibility training, students can understand how much they have mastered the knowledge and methods of flexibility training.

### 3.4 Participatory Learning:

- 1) Teacher's explanation: Firstly, teachers will explain and demonstrate the characteristics, principles and requirements of flexibility training with PPT.
- 2) Students' participation: Students are divided into six groups to practice flexible movements, including three means and two methods. The three means are: using external tools, relying on external forces, using their own power; Two methods are: static tensile method, dynamic tensile method.
- 3) Interactive session: After the movement exercise, each group will perform the movement demonstration. Each group recommends one student to be the speaker, and the other students demonstrate actions. While students share, teachers can supplement their knowledge.

### 3.5 Post-assessment:

Through the method of asking questions, understand the students' grasp of dance flexibility training knowledge.

### 3.6 Summary:

The teacher evaluated the achievement of students' learning objectives through the comparison between post-test and pre-test knowledge points, summarized the content and knowledge points of this course, and predicted the learning content of the next class.

Homework: Design a form for children's flexibility training.

## 4. Media and Learning Resources

Media: Power point presentations Instructional video

Text Books: "Training Philosophy of Dance" and "anatomy of dance"

Auxiliary equipment: mat, handle bar, tension belt

## 5. Measurement and Evaluation

Measurement and evaluation through the following methods: 1) Teachers through observation; 2) Through students show the mind map in class; 3) Make children's dance flexible training in dance plan after class. Students' practised of basic knowledge is assessed by the accuracy of the test results and teaching reflection to improve the next teaching effect.

## Lesson plan 2

Course / Subject: Training Philosophy of Dance

Instructional Topic: Core strength ability training in dance

Class Level: The third grade

Time for Instructional: Two hours

Instructor' s name: Zhu Fengling

### 1. Objectives

1.1 Students can explain concepts of core strength ability training, classification of core strength ability training and significance of core strength ability training.

1.2 Students can show the means and methods of dance core strength training through actual movement exercises.

1.3 Students can design a preliminary plan suitable for children' s core strength ability training.

### 2. Content

Concept of core Strength ability, classification of core Strength ability, significance of core strength ability, means of core Strength ability, method of core strength ability.

Concept of core strength ability: The ability to bind the muscles in the upper and lower limbs.

Classification of core strength ability: Muscle capacity in the waist, pelvis, and hip joints.

Significance of core strength ability: Ensure the free movement of the upper and lower limbs; control the stability of the body center of gravity.

Means of core strength ability: Your own gravity exercises in class, extracurricular extra load exercises.

Method of core strength ability: Dynamic restraint exercise method, dynamic concession practice method, and other dynamic exercise method.

### 3. Instructional Strategies (teaching methods)

The teaching method is BOPPPS teaching method, including six parts:

#### 3.1 Bridge-in:

By playing teaching videos and pictures about core strength training, compare and analyze the different characteristics of core strength training of dancers and practitioners of other sports events, thus leading to the learning objectives and tasks of this course.

#### 3.2 objective:

The teacher introduces the teaching objectives of this class to the students:

Students can explain concepts of core strength ability training, classification of core strength ability training and significance of core strength ability training.

Students can show the means and methods of dance core strength training through actual movement exercises.

Students can present the PPT about the basic principles and main characteristics of core strength ability training.

Students can design a preliminary plan suitable for children's core strength ability training.

### 3.3 Pre-assessment:

Through students' sharing of their own experience in the process of core strength training, students can know how to master the knowledge and methods of core strength ability training.

### 3.4 Participatory Learning:

1) Teacher's explanation: teachers will explain and demonstrate with PPT so that students can understand the characteristics, principles and requirements of dance core strength ability training.

2) Student participation: Students are divided into groups to conduct movement exercises, which mainly include two means and six methods of dance core strength training. The two methods are: self gravity exercise (ground exercise, upper exercise, middle exercise); Six methods are: dynamic restraint exercise, dynamic retreat exercise, isodynamic exercise, isostatic exercise, static exercise, variation exercise.

3) Interactive session: After the movement exercise, each group will perform the movement demonstration. One student from each group is recommended as the speaker, and the other students demonstrate the movements of four abdominal muscles and core muscles of the back. While students share, teachers can supplement their knowledge.

### 3.5 Post-assessment:

Through the method of asking questions, to understand the students' grasp of the dance core strength training knowledge.

### 3.6 Summary:

Teachers evaluate the completion of students' movements, summarize the content and knowledge points of this course, and forecast the learning content of the next lesson.

Homework: Design the form of children's core strength training.

## 4. Media and Learning Resources

Media: Power Point presentations Instructional video

Text Books: "Training Philosophy of Dance" and "anatomy of dance", "the anatomy of exercise & movement"

Auxiliary equipment: mat, handle bar, yoga ball

## 5. Measurement and Evaluation

Measurement and evaluation through the following methods: 1) Teachers through observation; 2) Through students show the PPT in class; 3) Make children's core Strength ability training plan after class. students' practised of basic knowledge is assessed by the accuracy of the test results and teaching reflection to improve the next teaching effect.

### Lesson plan 3

Course / Subject: Training Philosophy of Dance

Instructional Topic: Speed training in dance

Class Level: The third grade

Time for Instructional: Two hours

Instructor' s name: Zhu Fengling

#### 1. Objectives

1.1 Students can explain the concept, classification and training significance of dance speed ability by watching videos and games;

1.2 Students can show the means and methods of dance speed training through actual movement exercises;

1.3 Students can design a preliminary plan suitable for children' s speed training.

#### 2. Content

The concept, classification, training significance, training means and methods of dance speed ability.

The concept of dance speed ability: the sum of the dancer' s ability to move body or part of the body quickly and the time of action reaction time.

Classification of dance speed ability: Fast action, quick response, and fast mobility.

Significance of dance speed ability: It is the necessary ability requirement for dance performance ability, basic dance ability and dance technical skills, and it is also the key index of dance material selection.

Means of dance speed ability: 1. Practice to use external help to improve the movement speed; 2. Practice to improve the action speed by reducing the load and weight; 3. Exercise to increase the action speed; 4. Practice to improve the movement speed with signal stimulation; 5. Reduce the action construction and practice boundary to improve the action speed.

Methods of dance speed ability: Use power method, post-effect method, introduction of speed method, improve technical method, increase difficulty method, development force method and repeated practice method.

#### 3. Instructional Strategies (teaching methods)

The teaching method is BOPPPS teaching method, including six parts:

##### 3.1 Bridge-in:

Through games, students are curious about the speed movement in dance, which leads to the learning objectives and tasks of this course.

##### 3.2 objective:

The teacher introduces the teaching objectives of this class to the students:

Students can explain the concept, classification and training significance of dance speed ability by watching videos and games.

Students can show the means and methods of dance speed training through actual movement exercises.



Students can present the PPT about the basic principles and main characteristics of speed ability training.

Students can design a preliminary plan suitable for children's speed training.

### 3.3 Pre-assessment:

Through the way of competition test students' fast movement ability. One student from each group was tested on the number of front kicks completed in one minute.

### 3.4 Participatory Learning:

1) Teacher's explanation: teachers explain the characteristics, principles, requirements and load of speed ability training based on videos and PPT;

2) Students' participation: Students are divided into groups to do movement exercises, including nine methods of speed ability training. The nine methods are: simple response speed training, complex response speed training, the use of power method, after effect effect method, the introduction of speed method, improve the technical method, increase the difficulty of the law, the development of strength method, repeated practice method.

3) Interactive session: After the exercise, students will have a group discussion. One person will speak on behalf of the group and share the training effect. Teachers make supplements and comments in the sharing process.

### 3.5 Post-assessment:

Through the form of questioning, to understand the students' grasp of dance speed ability training knowledge.

### 3.6 Summary:

The teacher summarizes the content and knowledge points of this course, evaluates the students' learning situation, and predicts the learning content of the next class.

Homework: Design a schedule suitable for children's speed training.

## 4. Media and Learning Resources

Media: Power Point presentations Instructional video

Text Books: "Training Philosophy of Dance" and "anatomy of dance"

Auxiliary equipment: cushion, handle bar

## 5. Measurement and Evaluation

Measurement and evaluation through the following methods: 1) Teachers through observation; 2) Through students show in class; 3) Make children's speed training in dance plan after class. Students' practised of basic knowledge is assessed by the accuracy of the test results and teaching reflection to improve the next teaching effect.

#### **Lesson plan 4**

Course / Subject: Training Philosophy of Dance

Instructional Topic: Agility training in dance

Class Level: The third grade

Time for Instructional: Two hours

Instructor' s name: Zhu Fengling

##### **1. Objectives**

1.1 Students can explain the concept, classification and training significance of agility training in dance by watching video materials and teacher explanation.

1.2 Students can show the means and methods of agility training in dance through practical action training.

1.3 Students can design a preliminary plan suitable for children' s agility Training.

##### **2. Content**

The concept, training significance, training means and methods of dance agility ability.

The concept of dance agility ability: It is the ability of the dancer to manipulate the body to make it flexible, fast, agile, and accurately change posture, stabilize balance, rotate movements, and make responsive movements.

Significance of dance agility ability: 1. conducive to showing the action beauty of dance performance; 2. conducive to improving the completion quality of technical skills; 3. conducive to promoting the development of speed and other basic capabilities.

Means of dance agility ability: Training to speed and improve difficulty.

Methods of dance agility ability: Quickly change action method, change action speed method, unconventional completion action method and increase technical difficulty method, etc.

##### **3. Instructional Strategies (teaching methods)**

The teaching method is BOPPPS teaching method, including six parts:

###### **3.1 Bridge-in:**

Play dance video clips to attract students' interest in learning, and then introduce the learning objectives and tasks of this course by appreciating the exquisite dance performance in excellent dance works.

###### **3.2 objective:**

The teacher introduces the teaching objectives of this class to the students:

Students can explain the concept, classification and training significance of agility training in dance by watching video materials and teacher explanation.

Students can show the means and methods of agility training in dance through practical action training.

Students can design a preliminary plan suitable for children' s agility training.

###### **3.3 Pre-assessment:**

Ask questions to understand students' understanding of dance agility.

### 3.4 Participatory Learning:

- 1) Teacher' s explanation: teachers will explain and demonstrate with PPT, so that students can understand the characteristics, principles, requirements and load of dance agility training.
- 2) Student participation: Students are divided into groups to practice movements and experience the training methods of dance agility: speed training method, difficulty training method and auxiliary training method.
- 3) Interactive session: After the movement exercise, each group invites one student to share the reason why the agility of dance must be trained by speeding up the speed and increasing the difficulty. In this process, teachers make comments and in-depth explanation of knowledge points.

### 3.5 Post-assessment:

Through the method of asking questions, to understand the students' grasp of the dance agility training knowledge.

### 3.6 Summary:

The teacher can understand the achievement of the learning objectives of the students by the accuracy of students' signature and answering questions after class, and summarize the content and knowledge points of this course. Assign homework and predict what to learn in the next class.

Homework: Design a form for children' s flexibility training.

### 4. Media and Learning Resources

Media: Power Point presentations Instructional video

Text Books: “Training Philosophy of Dance” and “anatomy of dance”

Auxiliary equipment: mat, handle bar, dance props, or game props

### 5. Measurement and Evaluation

Measurement and evaluation through the following methods: 1. Teachers through observation; 2. Through students show in class; 3. Make children' s agility training in dance plan after class. Students' practised of basic knowledge is assessed by the accuracy of the test results and teaching reflection to improve the next teaching effect.

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## Lesson plan 5

Course / Subject: Training Philosophy of Dance

Instructional Topic: Endurance training in dance

Class Level: The third grade

Time for Instructional: Two hours

Instructor's name: Zhu Fengling

### 1. Objectives

1.1 Students can explain the concept, classification and training significance of dance durability ability by watching video materials and teacher explanation.

1.2 Students can show the means and methods of dance durability training through practical action training.

1.3 Students can design a preliminary plan suitable for children's endurance training.

### 2. Content

The concept, classification, training significance, training means and methods of dance durability.

Concept of dance durability: It refers to the ability of the dancer to overcome fatigue during work and work for a long time.

Classification of dance durability: General endurance and specialized endurance

Significance of dance durability: 1. conducive to improve the ability to resist fatigue; 2. conducive to improve the recovery ability after fatigue; 3. conducive to the cultivation of dancer will; 4. conducive to improve the ability to show dance beauty.

Means of dance durability: Periodic exercises, aperiodic exercises, and game-based competitive exercises.

Methods of dance durability: Continuous practice, repeated practice, intermittent practice, change practice, game competition practice method and cycle practice, etc.

### 3. Instructional Strategies (teaching methods)

The teaching method is BOPPPS teaching method, including six parts:

#### 3.1 Bridge-in:

The dance video fragments are played to arouse the students' curiosity. Through appreciating the exquisite dance control in the excellent dance works, it leads to the learning objectives and tasks of this course.

#### 3.2 objective:

The teacher introduces the teaching objectives of this class to the students:

Students can explain the concept, classification and training significance of dance durability ability by watching video materials and teacher explanation.

Students can show the means and methods of dance durability training through practical action training.

Students can design a preliminary plan suitable for children's endurance training.

#### 3.3 Pre-assessment:

Know students' understanding and understanding of dance durability by asking questions.

### 3.4 Participatory Learning:

- 1) Teacher explanation: the teacher explains and demonstrates combined with PPT , so that students can understand the characteristics , principles , requirements and load of dance endurance training.
- 2) Student participation: students conduct action exercises in groups, and actually experience the dance durability ability training method: continuous practice method, repeated practice method, intermittent practice method, change practice method, game competition practice method, cycle practice method.
- 3) Interactive link: After the action exercise, the action will be displayed. Each group will invite a student to share the content about anaerobic endurance and aerobic endurance. Students need to prepare the materials in advance. In this process, the teacher commented on it and deepened the explanation of the knowledge points.

### 3.5 Post-assessment:

Know the students' knowledge of dance durability training through asking questions.

### 3.6 Summary:

Through the accuracy of students' answer questions before and after class, teachers understand the achievement of learning goals, and summarize the content and knowledge points of this course. Arrange homework and preview of the next lesson.

Homework: Design a form for children' s durability training.

### 4. Media and Learning Resources

Media: Power Point presentations Instructional video

Text Books: “Training Philosophy of Dance” and “anatomy of dance”

Auxiliary equipment: cushion, handle bar, tension belt, stopwatch

### 5. Measurement and Evaluation

Measurement and evaluation through the following methods: 1. Teachers through observation; 2. Through students show in class; 3. Make children' s endurance training in dance plan after class. Students' practised of basic knowledge is assessed by the accuracy of the test results and teaching reflection to improve the next teaching effect.

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## Lesson plan 6

Course / Subject: Training philosophy of Dance

Instructional Topic: Characteristics and principles of dance training

Class Level: The third grade

Time for Instructional: Two hours

Instructor' s name: Zhu Fengling

### 1. Objectives

1.1 Students can explain the characteristics and principles of dance training.

1.2 Students can show the PPT of the analysis of the dance works.

1.3 Students can write the legends of the training system of Chinese classical dance.

### 2. Content

Characteristics of dance training, the principles of dance training.

Characteristics of dance training: External performance of the intrinsic and essential characteristics of the dance. Including: functional and expressive, practical and intuitive, musical and combination, general and specialization, continuity and stage, adaptability and bad deformation.

The principles of dance training: It is based on the purpose of the dance training and the understanding of the objective laws of the training process. Including: aesthetic effect principle, system training principle, appropriate load principle, intuitive coach principle, teaching students in accordance with their aptitude principle, strict standard principles, scientific guiding principles.

### 3. Instructional Strategies (teaching methods)

The teaching method is BOPPPS teaching method, including six parts:

#### 3.1 Bridge-in:

Play dance video, share different dance types presenting a variety of artistic styles, so as to lead to the learning objectives and tasks of this course.

#### 3.2 objective:

The teacher introduces the teaching objectives of this class to the students:

Students can explain the characteristics and principles of dance training.

Students can show the PPT of the analysis of the dance works.

Students can write the legends of the training system of Chinese classical dance.

#### 3.3 Pre-assessment:

Learn about the students' mastery of the different dance styles by asking questions.

#### 3.4 Participatory Learning:

1) Teacher explanation: teachers should explain and demonstrate combined with PPT, so as to let students understand the principles of dance training: aesthetic effect, systematic training, appropriate load, intuitive coach, teaching in accordance with their aptitude, strict norms and scientific guiding principles.

2) Students discuss the training characteristics of the different dance types in groups. It is mainly analyzed from the following aspects: functionality and expression,

practicality and intuition, musicality and combination, generality and specialization, continuity and stage, and adaptive deterioration.

3) The students are divided into six groups (one question per group), and the students can speak on the results just discussed, and the teachers can supplement the students' speech.

#### 3.5 Post-assessment:

Ask students questions. The question is about the training characteristics of the different dance types ? Through the students ' answers, to understand the students' grasp of the characteristics and principles of dance training.

#### 3.6 Summary:

The teacher sorted out and summarized all the knowledge points of the dance ability training part of "dance training", evaluated the overall situation of students' teaching objectives, and put forward practical requirements in the future.

#### 4. Media and Learning Resources

Media: Power Point presentations Instructional video

Text Books: “Training Philosophy of Dance” and “anatomy of dance”

#### 5. Measurement and Evaluation

Measurement and evaluation through the following methods: 1. Teachers through observation; 2. Through students show in class; 3. Make a chart of the training system of Chinese classical dance. Students' practised of basic knowledge is assessed by the accuracy of the test results and teaching reflection to improve quality of teaching.

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### Learning achievement test

Select questions (4 points per question, 100 points in total)

1. What are the characteristics of dance training? ( )
  - A. Functionality and Expressiveness
  - B. Practicality and Intuition
  - C. Musicality and Combination
  - D. Generality and Specialism
2. What principles should the dance training be based on? ( )
  - A. Principles of systematic training
  - B. Principles of aesthetic effect
  - C. Principles of teaching students in accordance with their aptitude
  - D. Principles of strict norms
3. What principles are used to determine the students' personal characteristics, formulate the training goals, determine the training tasks, select the training methods and means, and arrange the training load?( )
  - A. Principles of intuitive coaching
  - B. Principles of appropriate load
  - C. Principles of teaching in accordance with their aptitude
  - D. Principles of strict norms
4. What kind of ability is the dancer's neuromuscular system to overcome or combat resistance at work? ( )
  - A. Speed ability
  - B. Flexibility
  - C. Sensitivity
  - D. Strength
5. According to the functional properties of strength and ability, what can it be divided into other than stability, flexibility, speed, reaction, durability? ( )
  - A. Control force
  - B. Explosive force
  - C. Power force
  - D. Static force
6. What is the meaning of maintaining the body posture, and center of gravity through the muscle static contraction to control the balance or stable work force? ( )
  - A. Speed
  - B. Stability
  - C. Outside
  - D. Durability
7. What kind of exercise method do leg lifting, kicking, waist movements belong to?( )
  - A. Dynamic restraint exercise method
  - B. Dynamic concession exercise method
  - C. Equal motion exercise method



D. Super isomlength exercise method

8. What are the requirements of strength training? ( )

A. Try to increase the range of action

B. Ensure the quality of action practice

C. Strictly require action specifications

D. Pay attention to relax muscles in time

9. What are the attributes of the dancer' s body range of motion in different dimensions, as well as the stretching ability and flexibility of soft tissues such as muscles, tendons, and ligaments?( )

A. Strength

B. Speed

C. Flexibility

D. Sensitivity

10. What ability does hip rotation and hind stretch show hind leg movement?( )

A. Passive flexibility

B. Dynamic flexibility

C. Active flexibility

D. static flexibility

11. What is the method of flexibility and ability training?( )

A. Force Practice

B. External tools use

C. External Power use

D. Your own power use

12. What is the course of dance flexibility training? ( )

A. Basic skills training class

B. Dance and martial arts skills class

C. Ballet class

D. Dance-assisted training class

13. What does the amount of training for dance flexibility include? ( )

A. Length of time

B. Number of completed groups

C. Number

D. Amount of time

14. What ability does the dancer' s ability of the body or part of the body to complete a movement or set of movements quickly refer to?( )

A. Flexibility ability

B. Strength ability

C. Speed ability

D. Sensitivity ability

15. What does the training of rapid movement ability include other than the use of power method, post-effect method, introduction of speed method and what?( ).
- A. Increasing the difficulty method
  - B. Developing the force method
  - C. Improving the technical method
  - D. Repeating the practice method
16. What is the component of speed competency training? ( )
- A. Duration
  - B. Total Time
  - C. Number
  - D. Number of groups
17. What is the best training time for speed training? ( )
- A. Morning
  - B. afternoon
  - C. Night
  - D. Unfixed
18. What is the core component of speed capability? ( )
- A. Fast movement ability
  - B. Fast direction ability
  - C. Fast movement ability
  - D. Rapid response ability
19. What can deal with different movement skills in the training of fast movement skills?( )
- A. Content
  - B. Strength
  - C. Quantity
  - D. Task
20. How to identify the persistence ability of dance according to the training characteristics? ( )
- A. Cardiorespiratory endurance
  - B. General endurance
  - C. Specialized endurance
  - D. Muscle endurance
21. What is the ability of dancers to overcome fatigue while continuously performing high-speed movements? ( )
- A. Short-time endurance
  - B. Whole-body endurance
  - C. Dynamic endurance
  - D. Speed endurance

22. What are the forms of classroom endurance training? ( )
- A. Form of single repetition
  - B. Form of string exercises
  - C. Form of combinatorial exercises
  - D. Form of aperiodic training
23. What is the basis of durability training?( )
- A. Anaerobic endurance
  - B. Aerobic endurance
  - C. Random training
  - D. Respiratory training
24. What is the characteristic of sensitivity ability? ( )
- A. Ability to quickly transform movements
  - B. Ability to quickly control actions
  - C. Ability to respond quickly
  - D. Capability to move directions quickly
25. How to define the sensitivity and ability training methods according to the difficulty size?( )
- A. Methods for completing unconventional actions
  - B. Methods to increase technical difficulty
  - C. Auxiliary training methods for sensitivity ability
  - D. High-intensity training methods



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### Dance performance evaluation form

The assessment of dance performance adopts five aspects : Body, Action, Time, Space and Energy. The final score was an average of five points for Body, Action, Time, and Space and Energy. The score are divided into five levels : Excellent , Good, Medium good, Pass, No Pass.

	Excellent	Good	Medium good	Pass	No Pass
Fraction	$90 \leq F < 100$ points	$80 \leq F < 90$ points	$70 \leq F < 80$ points	$60 \leq F < 70$ points	$F < 60$ points
Body					
Action					
Time					
Space					
Energy					
Average					

Score rules for Dance performance evaluation form

	Excellent	Good	Medium good	Pass	No Pass
<b>Body</b>	Dance performers have excellent physical balance, strength control, and flexibility.	Dance performers have better physical balance, strength control, and	Dance performers have certain physical balance, strength control, and flexibility.	Dance performers have basic physical balance, strength control, and flexibility.	Dance performers do not have the physical balance, strength control, and flexibility required for

	<b>Excellent</b>	<b>Good</b>	<b>Medium good</b>	<b>Pass</b>	<b>No Pass</b>
		flexibility .			the dance.
<b>Action</b>	The dance performers have a stable center of gravity, accurate movement of fast and slow expression, clear movement space consciousness, and smooth movement display.	Dance performers have a relatively stable center of gravity, more accurate movement of fast and slow expression, more clear awareness of movement space, more smooth movement display.	Dance performers have good focus control ability, can consciously pay attention to the time of the action and space expression, and can complete the movement display more smoothly.	Dance performers have a certain center of gravity control ability to complete the action performance. However, the lack of expression in the control of movement time and space.	The center of gravity is unstable, the movement is not complete, and the movements lack expressive.
<b>Time</b>	The movements of the dance performers can be perfectly combined with the music to accurately express the free rhythm of the dance	The movements of the dance performers can be better combined with the music, and can better express	The movements of the dance performers can be completed according to the rhythm and rhythm of the music, and the free rhythm of the dance itself is	The movements of the dance performers can complete the movements according to the beat and rhythm of the music, but the free rhythm of the dance itself is general.	The dancers' movement beats are inaccurate, the music rhythm is chaotic, and they lack the free rhythm performance of the dance itself.

	<b>Excellent</b>	<b>Good</b>	<b>Medium good</b>	<b>Pass</b>	<b>No Pass</b>
	itself.	the free rhythm of the dance itself.	accurately expressed.		
<b>Space</b>	The dance performer is able to perform very accurately both the high, low, direction, location, orientation, path, range changes of the dance movements and the connection that the dancers have with each other. Excellent spatial performance ability.	The dance performers are able to complete the level, direction, location, direction, path, range and the connection that the dancers can connect with each other. Good spatial performance ability.	The dance performers can complete the change of height, direction, location, orientation, path and range of the dance movements. There is a certain cooperation between the dancers.	The dance performers can basically complete the changes of height, direction, location, orientation, path and range of dance movements.	The dancer cannot accurately complete the spatial changes of the dance movements. Lack of coordination between the dancers.
<b>Energy</b>	The movements of the dancers have a strong sense of impact, weight, fluency, and	The movements of the dance performers have a strong sense of impact,	The movements of the dancers have a certain sense of impact, weight, fluency, and quality. Ability	The dancers' movements have certain impact, weight, fluency and quality; lack of emotional expression.	The dancers' movements lack a sense of impact, weight, fluency, and quality. There was no emotional

	<b>Excellent</b>	<b>Good</b>	<b>Medium good</b>	<b>Pass</b>	<b>No Pass</b>
	quality.Can be perfect for emotional expression, very expressive.	weight, fluency and quality.Can accurately conduct emotional expression.	to make emotional expression, but not sufficient.		expression.



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### Satisfaction on learning management using the BOPPPS teaching method

Thank you for participating in our questionnaire, your feedback is very important to our teaching improvement. This questionnaire mainly aims at your feelings and experience of using BOPPPS teaching method in the learning management of the Training Philosophy Dance.

Grade :

Age :

Gender :  Male  Female

1. Are you satisfied with the teaching method of BOPPPS?  
strongly agree agree indifferent(no sure) disagree strongly disagree
2. Are you satisfied with the overall arrangement of the teaching plan and course?  
strongly agree agree indifferent(no sure) disagree strongly disagree
3. Are you satisfied with the information teaching method?  
strongly agree agree indifferent(no sure) disagree strongly disagree
4. Are you satisfied with the participative learning part of the BOPPPS teaching method?  
strongly agree agree indifferent(no sure) disagree strongly disagree
5. Are you satisfied with the assessment method of this teaching method?  
strongly agree agree indifferent(no sure) disagree strongly disagree
6. Are you satisfied with your final grades?  
strongly agree agree indifferent(no sure) disagree strongly disagree
7. Are you satisfied with your dance performance ability after adopting BOPPPS teaching method?  
strongly agree agree indifferent(no sure) disagree strongly disagree
8. Are you satisfied with the classroom atmosphere of this teaching method?  
strongly agree agree indifferent(no sure) disagree strongly disagree
9. Are you satisfied with your changing attitude after using this method of dance learning?  
strongly agree agree indifferent(no sure) disagree strongly disagree
10. Are you satisfied with the learning effect of BOPPPS teaching method in the Training Philosophy Dance?  
strongly agree agree indifferent(no sure) disagree strongly disagree





**APPENDIX C**

**RESULT OF ITEM OBJECTIVE CONGRUENCE (IOC)**

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### IOC of Learning achievement test

Item	Expert1			Expert2			Expert3			IOC	Result
	+1	0	-1	+1	0	-1	+1	0	-1		
1	√			√			√			$(1+1+1)/3=1$	Quality
2	√			√			√			$(1+1+1)/3=1$	Quality
3	√			√			√			$(1+1+1)/3=1$	Quality
4	√			√			√			$(1+1+1)/3=1$	Quality
5	√			√			√			$(1+1+1)/3=1$	Quality
6	√			√			√			$(1+1+1)/3=1$	Quality
7	√			√			√			$(1+1+1)/3=1$	Quality
8	√			√			√			$(1+1+1)/3=1$	Quality
9	√			√			√			$(1+1+1)/3=1$	Quality
10	√			√			√			$(1+1+1)/3=1$	Quality

The evaluation form about the Training Philosophy of Dance test had a total of 10 items, and the index of item objective congruence (IOC) of each item in the evaluation form is higher than 0.5 that mean it can be used in the evaluation form.

### IOC about the dance performance evaluation form

Item	Expert1			Expert2			Expert3			IOC	Result
	+1	0	-1	+1	0	-1	+1	0	-1		
1	√			√			√			$(1+1+1)/3=1$	Quality
2	√			√			√			$(1+1+1)/3=1$	Quality
3	√			√			√			$(1+1+1)/3=1$	Quality

4	√			√			√			$(1+1+1)/3=1$	Quality
5	√			√			√			$(1+1+1)/3=1$	Quality

The dance performance evaluation form had a total of 5 items, and the index of item objective congruence (IOC) of each item in the evaluation form is higher than 0.5 that mean it can be used in the evaluation form.

#### IOC of the students' questionnaire

Item	Expert1			Expert2			Expert3			IOC	Result
	+1	0	-1	+1	0	-1	+1	0	-1		
1	√			√			√			$(1+1+1)/3=1$	Quality
2	√			√			√			$(1+1+1)/3=1$	Quality
3	√			√			√			$(1+1+1)/3=1$	Quality
4	√			√			√			$(1+1+1)/3=1$	Quality
5	√			√			√			$(1+1+1)/3=1$	Quality
6	√			√			√			$(1+1+1)/3=1$	Quality
7	√			√			√			$(1+1+1)/3=1$	Quality
8	√			√			√			$(1+1+1)/3=1$	Quality
9	√			√			√			$(1+1+1)/3=1$	Quality
10	√			√			√			$(1+1+1)/3=1$	Quality

The evaluation form about the students' questionnaire had a total of 10 items, and the index of item objective congruence (IOC) of each item in the evaluation form is higher than 0.5 that mean it can be used in the evaluation form.



**APPENDIX D**  
**DATA**

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### Learning achievement test

		Mean	N	Std.Deviation	Std.Error Mean
Pair 1	posttest	86.4000	30	8.95044	1.63412
	pretest	77.3333	30	10.03900	1.83286

#### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	posttest & pretest	30	.952	.000

#### Paired Samples Test

	Paired Differences					t	df	Sig.(2-tailed)
	Mean	Std.Deviation	Std.Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 - pretest	9.06667	3.13966	.57322	7.89430	10.23904	15.817	29	.000

### Dance performance evaluation form

#### One-Sample Statistics

	N	Mean	Std.Deviation	Std.Error Mean
Posttest	30	84.2667	8.11526	1.48164

#### One-Sample Test

	Test Value = 21					
	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Posttest	42.701	29	.000	63.26667	60.2364	66.2970

**Students' satisfaction on learning activities questionnaire**

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
score	30	4.9100	.27082	.04945

**One-Sample Test**

	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
score	28.516	29	.000	1.41000	1.3089	1.5111



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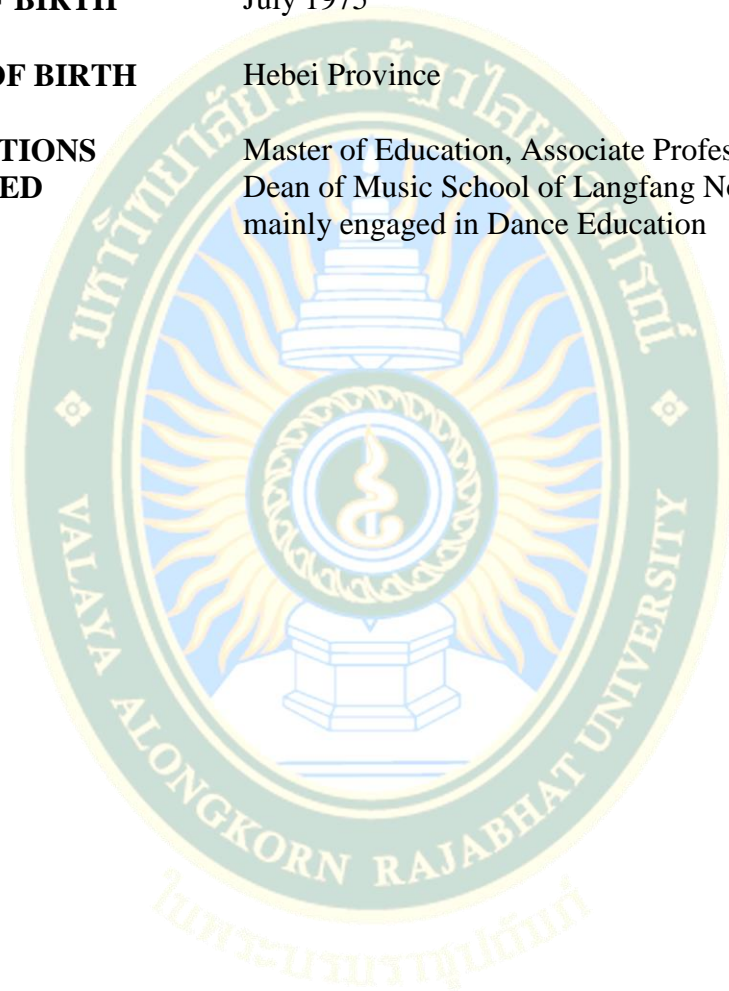
## CURRICULUM VITAE

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**INSTITUTIONS ATTENDED** Master of Education, Associate Professor, working as the Dean of Music School of Langfang Normal University, mainly engaged in Dance Education



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