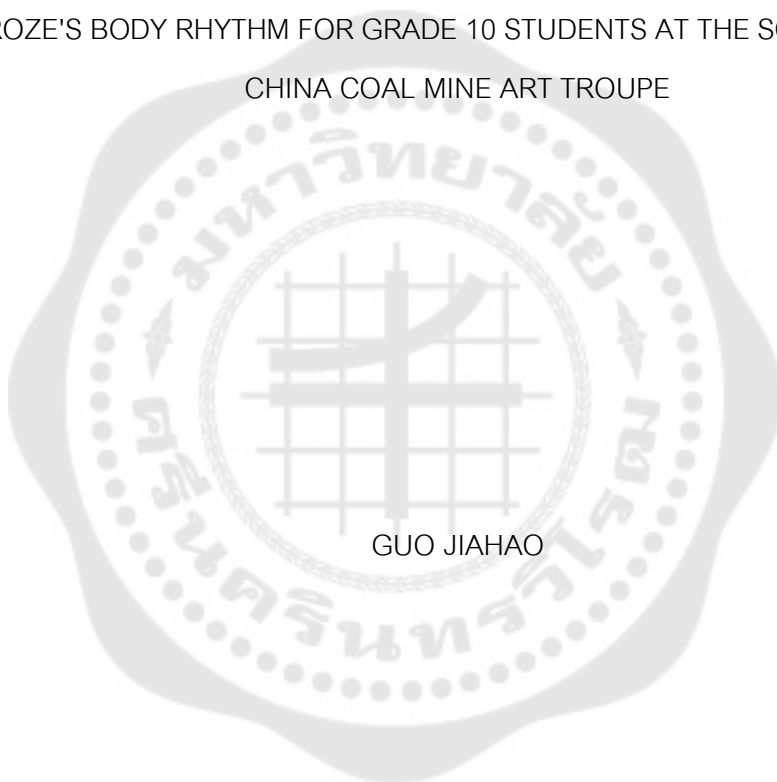




DEVELOPMENT AND DESIGN OF A DANCE IMPROVISATION COURSE UTILIZING
DALCROZE'S BODY RHYTHM FOR GRADE 10 STUDENTS AT THE SCHOOL OF ARTS,
CHINA COAL MINE ART TROUPE



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2024

การพัฒนาและออกแบบหลักสูตรรายวิชาการด้านสถาปัตยกรรมศิลป์ โดยประยุกต์แนวคิดจังหวะ
ร่างกายของดาโครซ สำหรับนักเรียนระดับชั้นมัธยมศึกษาตอนปลายชั้นปีที่ 4 ของแผนกโรงเรียน
ศิลปะ สถาบันไชนาโกลโมเนอาร์ททูป



ปริญญานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตร
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CHINA COAL MINE ART TROUPE



An Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of MASTER OF EDUCATION
(Art Education)

Faculty of Fine Arts, Srinakharinwirot University

2024

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THE THESIS TITLED

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CHINA COAL MINE ART TROUPE

BY

GUO JIAHAO

HAS BEEN APPROVED BY THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE MASTER OF EDUCATION
IN ART EDUCATION AT SRINAKHARINWIROT UNIVERSITY

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Academic Year	2024
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This study responds to persistent challenges in the field of improvisational dance education in China, particularly the absence of structured pedagogical models, the underdevelopment of student creativity, and widespread societal misconceptions surrounding improvisation. In addressing these issues, the research aims (1) to design a course in improvisational dance grounded in the principles of Body Rhythm as derived from the Dalcroze Eurhythmics method, and (2) to evaluate the course's overall quality through focus group discussions, with emphasis on pedagogical merit, implementation outcomes, practical applicability, and avenues for refinement. The proposed curriculum comprises four interrelated modules: theoretical foundations, music-body coordination, improvisational creation, and stage performance. It is intended for pilot implementation with 150 students at the China Coal Mine Art School. A mixed-methods design underpins the research, integrating a literature review, expert validation using the Index of Item-Objective Congruence (IOC), focus group discussions, and action research methodology. Assessment procedures are guided by a rubric evaluating technical execution (40%), musical responsiveness (40%), and creative output (20%), complemented by expert appraisals and student self-evaluations. Preliminary results reveal high content validity, with 87% of indicators receiving an IOC score of ≥ 0.67 . Experts further commend the innovative adaptation of Dalcroze pedagogy in alignment with 21st-century educational priorities, such as critical thinking and collaborative creativity. This curriculum seeks to re-establish the connection between musical perception and physical expression, while offering a scalable model for transformative dance education. Future research should consider the framework's cultural adaptability, digital implementation potential, and implications for educator training in broader contexts.

Keyword : Dalcroze Eurhythmics, improvisational dance, Body Rhythm, curriculum design, music-movement integration, creative education

ACKNOWLEDGEMENTS

As this research draws to a close, I would like to express my sincere gratitude to all individuals whose guidance, encouragement, and support have been instrumental throughout this academic journey.

First and foremost, I am deeply indebted to Assistant Professor Dr. Dharakorn Chandnasaro for his invaluable supervision and intellectual guidance. His profound knowledge, critical insights, and unwavering support have been essential in shaping the theoretical framework and refining the research design of this study. His dedication to academic excellence and his inspiring mentorship have left a lasting impact on both the research process and my personal development as a scholar.

I also wish to extend my heartfelt appreciation to all faculty members at Srinakharinwirot University. Their academic insights and constructive feedback during coursework and thesis development have significantly enriched my understanding and broadened my perspective. Every academic exchange, whether in class or through discussions, has served as a meaningful step in my scholarly growth.

In addition, I would like to acknowledge the invaluable support of my family and friends. Their unwavering encouragement, understanding, and patience provided the emotional strength needed to overcome the challenges encountered along the way. Their belief in me has been a constant source of motivation and comfort.

To all who have walked alongside me in this journey, whether through teaching, discussion, support, or simply their presence, I extend my heartfelt thanks.

GUO JIAHAO

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Current status of dance development: Improvisational dance is still in its infancy in my country. Although more and more dance artists and educators have begun to experiment and promote improvisational dance, the popularization and development of improvisational dance faces many challenges due to the lack of a systematic teaching system and a professional teaching team. In addition, the general public has a lack of understanding of improvisational dance and often regards it as an informal or non-mainstream art form. This prejudice has limited the development space of improvisational dance to a certain extent (Lv Yishen, 2000).

Current status of improvisational dance art education: In recent years, the Chinese government has continuously increased its attention to art education, and schools at all levels have opened dance courses to cultivate students' artistic literacy and creativity. At the same time, private dance studios and training institutions have sprung up, providing a variety of dance learning options for people of different ages. However, although dance education has been widely promoted, the teaching content often focuses on classical dance and skill training, lacking the cultivation of improvisational creation ability, so it is necessary to apply more scientific teaching methods to learners (Yang Limei, Cai Juemin, 2011). Since improvisational dance started late in my country, it is not as developed as some European countries, and there are also deficiencies in teacher training in my country. In addition, there is still a gap between the level of improvisational dance in my country and some improvisational dance powers, including the lack of music, and there is an urgent need for more scientific teaching methods. This has also caused reflection among improvisational

dance educators. Conventional teaching methods only focus on the training of improvisational dance movement skills, resulting in problems such as single dance course content, low student learning enthusiasm, and low classroom efficiency. Students just mechanically imitate the teacher's movements, the course is boring, and students lose interest in learning dance. For students' improvisational dance enlightenment teaching, we should not only focus on the explanation and training of dance movement skills. While improving physical fitness and technical movements, we should also explain and train dance music ability. Improvisational dance belongs to the group of high-difficulty and high-beauty performances. Music ability is an indispensable element in the evaluation of improvisational dance, and it is also what teachers should pay attention to (Chen 2019).

Lack of creativity: The lack of creativity among Chinese improvisational dance students has received increasing attention. Under the current dance education system, many students are often bound by traditional dance techniques and fixed routines, with fewer opportunities for free creation and improvisation. This phenomenon is partly due to the fact that the curriculum focuses too much on skill training and neglects to cultivate students' independent thinking and innovation. Students are often lost in repetitive imitation and standardized training, lacking sufficient space and encouragement to try new forms of expression or explore their own unique dance language. In addition, society's utilitarian expectations of dance have also exacerbated this problem. Many students and parents do not attach importance to improvisational dance, often focusing more on the mastery of technology and competition results, while ignoring the importance of creativity. This tendency has led to restrictions on the teaching and practice of improvisational dance, and students often lack sufficient confidence and innovation when facing a real stage.

The body rhythm teaching method was introduced to China as a music teaching system at the end of the 20th century. Its concept is similar to the teaching concept of

American dancer Isadora Duncan. Duncan, 1877-1927. Their dance theories are similar. Duncan's dance theory principles are based on natural rhythms and movements, and his body rhythm teaching method also provides a set of educational forms for the development of current dance.

Introducing the Dalcroze teaching method to solve the problem: "Body rhythm" is an important music teaching method in the Dalcroze music teaching system. It is to induce sensory reactions by listening to and performing body movements, use movements to improvise the musical elements heard, experience the changes in music duration, intensity, and pitch, and strengthen the internal connection of students' body senses. In short, the characteristic of "body rhythm" is to improvise through musical elements, which is also a form of improvisation (Wang and Lu 2019). Therefore, "body rhythm" has a natural fit with improvisational dance. Applying "body rhythm" to improvisational dance teaching and combining the two for teaching can not only enrich the way of improvisational dance teaching, but also develop students' imagination and creativity from multiple dimensions.

1.2 Research objectives

1. To design an improvisational dance course by applying the concept of Body Rhythm from Dalcroze.
2. To evaluate the quality of the course through focus group discussions in terms of its quality, implementation outcomes, applicability, and suggestions for improvement.

1.3 Research Questions

- (1) How to use the body movements in the Dalcroze teaching method to design improvisational dance courses?
- (2) How would you evaluate the impact of this course on students' improvisational abilities?

1.4 Research Hypothesis

Applying the "body rhythm" in the Dalcroze teaching method to improvisational dance teaching can effectively improve students' technical quality, music processing ability and creativity.

1.5 Research significance

For educators: The significance of this study is to provide new perspectives and methods for dance education, helping teachers and dance practitioners to more fully understand the potential and value of improvisational dance. With the continuous progress of modern dance education, improvisational dance, as an important dance form, has been increasingly valued for its creativity and immediacy. The Dalcroze teaching method, with its unique music education concept, emphasizes the comprehensive use of hearing, vision and kinesthetics, providing a new perspective for improvisational dance.

For students: Dalcroze teaching method, as a newly introduced teaching method, can help students learn better and improve their personal dance ability. It can be regarded as a learning method channel whether in the current school or in the future study life.

1.6 Definition of terms

(1) Improvisational dance

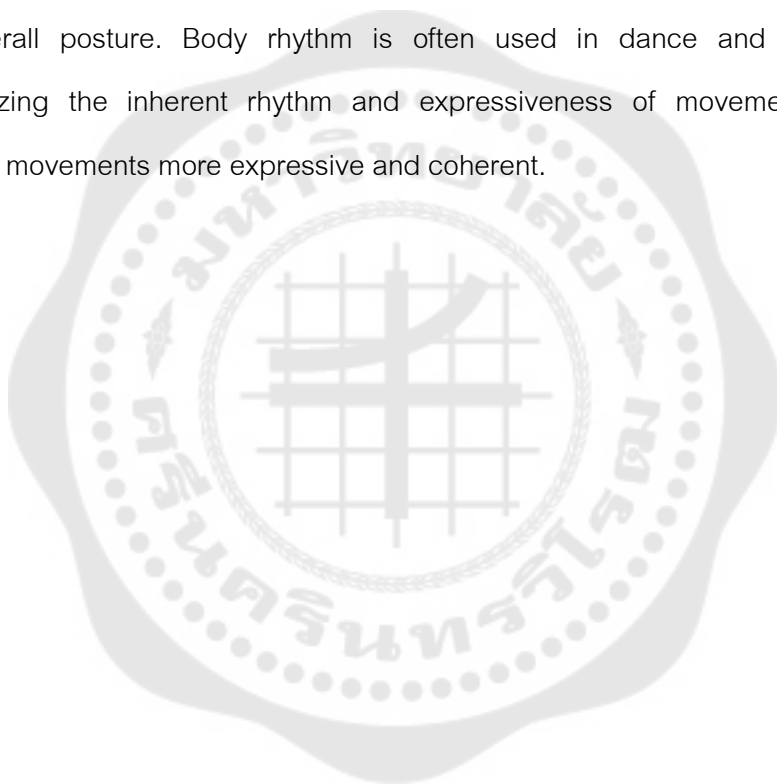
Improvisational dance is a form of dance that does not rely on pre-choreographed movements, but rather freely creates and interprets dance according to the feelings and environment of the moment. This dance form emphasizes immediate reaction and personal expression, allowing dancers to explore unique movement languages and styles. It is an important form of artistic expression.

(2) Dalcroze teaching method

The Dalcroze teaching method was proposed by Emile Jacques Dalcroze. It mainly includes three aspects: body rhythm, sight-singing and ear-training, and improvisational music activities. This article mainly emphasizes body rhythm.

(3) Physical exercise

Body rhythm refers to the natural rhythm and movement of the body in action and posture. It reflects the dynamic balance and coordination of the body in space, and creates a sense of smooth movement and rhythm through the control of muscles, joints and overall posture. Body rhythm is often used in dance and performing arts, emphasizing the inherent rhythm and expressiveness of movements, making the dancer's movements more expressive and coherent.



CHAPTER 2

LITERATURE REVIEW

2.1 History and Concept of Dance Improvisation

The body rhythm teaching method was introduced to China as a music teaching system at the end of the 20th century. Its concept is similar to the teaching concept of American dancer Isadora Duncan. Duncan's (1877-1927) dance theory has something in common. Duncan's dance theory principles are based on natural rhythms and movements, and his body rhythm teaching method has also provided a set of educational forms for the development of dance today.

"Body rhythm" is an important music teaching method in Dalcroze's music teaching system. It is to induce sensory reactions by listening to and performing body movements, and to improvise the heard music elements with movements, so as to experience the changes in music duration, intensity, and pitch, and strengthen the internal connection of students' body senses. In short, the characteristic of "body rhythm" is to improvise through music elements, which is also a kind of improvisation (Chen 2007). Therefore, "body rhythm" and improvisational dance have a natural fit. Applying "body rhythm" to improvisational dance teaching and combining the two for teaching can not only enrich the way of improvisational dance teaching, but also develop students' imagination and creativity from multiple dimensions.

2.2 Dalcroze's theory of ideas

Dalcroze's theory of ideas includes the following aspects:

First, respect the laws of student development: Dalcroze believes that each student is an independent individual with his or her own unique laws of development. Education should respect these laws and help students develop themselves and realize

their potential. This concept reflects respect for individual differences among students and encourages educators to develop corresponding teaching plans based on the different development stages and characteristics of students (Yang 2024).

Second, body movement teaching. Body movement is the core content of Dalcroze's music education system. He believes that the perception of music depends not only on hearing, but also on other senses, especially the sense of movement of the body. Through body movement, students use regular body movements to feel and express music while listening to music. This teaching method aims to cultivate students' musical sensitivity and expressiveness, so that they can understand and love music more deeply (Li 2024).

Third, improvisation teaching. Dalcroze particularly emphasized the importance of improvisation in music education. He believed that improvisation is an important part of the comprehensive training of musical talents. Through improvisation, students' creativity, adaptability and expressiveness can be trained. In improvisation teaching, teachers will encourage students to freely play according to the rhythm, melody, emotion, etc. of the music to create personalized musical works (Wang 2024).

Fourth, comprehensive development education. Dalcroze's music education system not only focuses on the training of music skills, but also focuses on cultivating students' comprehensive qualities. He believes that music education should be combined with physical, emotional, and social education to promote the all-round development of students. In Dalcroze's music class, students can exercise their physical coordination, emotional expression, social skills, etc. through various music activities (Zhou 2021).

Fifth, the close connection between music and emotion. Dalcroze believed that the essence of music lies in the response to emotion. Humans transform their inner emotions into music through their bodies, which is the origin of music. Therefore, in music education, he pays special attention to cultivating students' musical sensitivity

and expression, allowing them to express their emotions and thoughts through music (Wang 2021).

In summary, Dalcroze's music education theory takes respect for the laws of student development as its starting point, takes body rhythm and improvisation as its core content, and aims to promote the all-round development of students through music education. These ideas and theories have had a profound impact on modern music education and have provided strong support for the cultivation of creative and expressive music talents.

2.3 Theories and concepts of creativity

2.3.1 The concept of creativity

Creativity is a comprehensive skill unique to human beings, which refers to the ability to generate new ideas, discover and create new things. This ability is the psychological quality necessary for the successful completion of a certain creative activity. It is composed of complex and multi-factor optimization such as knowledge, intelligence, ability, and excellent personality qualities. Creativity is not only reflected in the fields of science, art, and technology, but also widely penetrates into all aspects of social life. It is an important force to promote social progress and development. The most notable feature of creativity is novelty, that is, the ability to create unprecedented and unique things or ideas. This novelty can be theoretical innovation, technological breakthroughs, or new styles in art. The new things or new ideas created by creativity must have certain value, including practical value, academic value, moral value or aesthetic value, which enables the results of creativity to bring practical benefits to society or individuals. Creativity is a series of continuous, complex, and high-level psychological activities that require a person's full physical and intellectual strength to be highly tense, and also requires the highest level of creative thinking. This complexity requires a lot of conditions and efforts to cultivate and exert creativity (Cheng 2013).

2.3.2 Relevant theories of creativity

The main theories of creativity include Guilford's three-dimensional structure of intelligence, Steinberg's creativity investment theory, and Guilford's creative thinking evaluation criteria (Ma 2024).

Guilford's three-dimensional theory of intelligence: This theory was proposed by American psychologist Guilford in 1967, which believes that intelligence can be divided into three dimensions: content, operation and product. This theory emphasizes the diversity of intellectual activities. The content of intellectual activities includes hearing, vision, symbols, semantics, behavior, etc.; intellectual operations include cognition, memory, divergent thinking, convergent thinking, evaluation and other processes; the products of intellectual activities include units, categories, relationships, systems, transformations, implications and other results. Guilford also pointed out that the core of creative thinking is divergent thinking, and used the fluency, flexibility and novelty of thinking as indicators to evaluate the level of creative thinking (Ma Qinghong, 2024).

Steinberg's Creativity Investment Theory: Different from the traditional tendency to reduce creativity, Steinberg proposed a multidimensional structure of creativity, believing that creativity is an organic combination of multiple factors. This theory emphasizes the investment nature of creativity, including investment in intelligence, knowledge, thinking style, personality and motivation, as well as the interaction and influence between these factors (Ma Qinghong, 2024).

Guilford's evaluation criteria for creative thinking: Based on the three-dimensional structure model of intelligence, Guilford proposed three criteria for evaluating creative thinking: fluency, flexibility and originality. Fluency refers to the number of different ideas that an individual can generate within a specified time when facing a problem situation; flexibility emphasizes non-conformism and the ability to

adapt to changes; originality focuses on generating novel and unique ideas (Ma Qinghong, 2024).

Together, these theories reveal the multidimensionality of creativity, emphasizing that creativity is not just a single ability, but the result of the interaction of multiple factors, providing a multi-angle perspective for understanding and cultivating creativity.

2.4 National Policy

In March 2019, the Ministry of Education issued the "Opinions on Strengthening Aesthetic Education in Colleges and Universities in the New Era", which clearly pointed out that higher education should take strengthening aesthetic education in an all-round way as an important task. Dance, as an important part of aesthetic education, can cultivate the ability of teaching objects to feel, express, appreciate and create beauty. However, improvisational dance is different from general dance forms. It is a dance form that triggers inner resonance under the stimulation of external factors and freely expresses emotions through body movements. Improvisational dance has the basic characteristics of immediacy, creativity and personalization. It focuses on encouraging students to actively explore the time, space and power of dance movements, and use their bodies to perform coherent dance improvisation, which is conducive to developing students' imagination and creativity, cultivating students' ability to capture their own body movement vocabulary, making their improvisational movements smooth, their body coordination and flexibility, and having a certain degree of extension, contraction and control. Therefore, improvisational dance is not only conducive to improving the sensitivity of students' sensory organs and stimulating students' inner emotional expression, but also has a positive effect on students' independent innovation consciousness and coordinated development of body and mind.

"Guiding Opinions on Further Supporting College Students' Innovation and Entrepreneurship": Issued by the General Office of the State Council, it aims to enhance college students' innovation and entrepreneurship capabilities and support college students' innovation and entrepreneurship. The document proposes to integrate innovation and entrepreneurship education into the entire process of talent training, strengthen the innovation and entrepreneurship education and teaching capabilities and literacy training of college teachers, strengthen the construction of innovation and entrepreneurship service platforms for college students, optimize the innovation and entrepreneurship environment, and provide fiscal and taxation support and financial policy support.

2.5 Theories and concepts of dance choreography

A choreographer is a comprehensive artistic role. He is both the creator and director of dance works. He shoulders the dual mission of choreographer. He is not only responsible for conceiving and choreographing dance movements, but also for transforming dance movements into stage performances. Due to the particularity of dance, choreographers need to consider various factors such as body shape, expression, and scene scheduling during the creation process. They also have special requirements for composition, art, and stage design. Therefore, choreographers need to master certain dance performance skills and dance creation knowledge, including a thorough understanding of the characteristics of dance art, means of expression, techniques of expression, and dance categories, so as to master the special laws of dance creation and choreograph dance programs (Feng 2015).

Dance choreography theory mainly includes dance choreography theoretical knowledge, choreography techniques, imagination development, the combination of dance language and stage choreography, the practice of improvisation, the combination of music and dance, etc. Dance choreography theoretical knowledge

involves the basic knowledge and skills of dance and performance, including the creation and choreography theory of dance and ballet, the skills of human movement creation, and the appreciation of dance music. This knowledge is particularly important when art performance groups create and choreograph dance, ballet movements, and shapes. There are many choreography techniques, including movement element choreography, shape implementation method, movement and rhythm connection method, movement and momentum choreography, movement part restriction method, symphony choreography, ontological element method, music choreography, improvisation choreography, etc. These techniques are interconnected and can be used flexibly, which is crucial to improving the creative ability of dance choreographers (She 2011).

The cultivation of imagination is the foundation of artistic creation. Dance imagination comes from the careful and keen observation of objective things and the experience of real life. The cultivation of imagination requires a lot of practice, and trying various propositions of imagination sketches, such as imagination exercises on people, animals, plants, objects, imagination exercises on space, imagination exercises on "shadows", etc., in order to create a dance with novel ideas (Xu 2014).

The combination of dance language and stage choreography plays an important role in dance creation. Dance language refers to the combination of one or more dance movements with breathing, strength, music melody, rhythm and other factors within a certain period of time. After the creator's organization, it becomes a special body language and expression form that can express certain thoughts, emotions and intentions. Stage choreography involves the combination of dance and music, as well as how to express emotions, show personality and create atmosphere through dance language and stage choreography (He 2024).

Practice improvisational dance. Improvisational dance is a kind of dance that is performed for one's own amusement and is not prepared. Through the practice of

improvisational dance, choreographers can be trained to capture the dynamic feeling of the collision between body movements and music, and find useful materials from improvisation, which is very helpful for improving the choreographer's creative ability and skills.

To sum up, the knowledge and skills involved in dance choreography theory are very broad, including the study of theoretical knowledge, the mastery of choreography techniques, the use of imagination, the application of dance language and stage choreography, the practice of improvisational dance, etc. These are the basic qualities and skills necessary to become an excellent dance choreographer.

2.6 Course Design Principles

2.6.1 Respect students' individuality and creativity

Improvisational dance teaching should respect the individuality and uniqueness of each student and encourage students to create dances based on their own feelings and understanding. The core of improvisational dance lies in creativity and improvisational expression. The course design should stimulate students' creativity and allow them to dare to try new dance forms and expressions.

2.6.2 Clarify teaching objectives

When designing improvisational dance courses, it is necessary to clearly define quantifiable teaching objectives, such as improving students' physical flexibility, coordination, and expressiveness. It is necessary to focus not only on improving students' dance skills, but also on cultivating students' emotional expression and aesthetic abilities.

2.6.3 Reasonable arrangement of teaching content

At the beginning of the course, students are guided to practice basic skills such as flexibility and coordination to lay a solid foundation for improvisation. Through free creation and other methods, students' creative thinking and expression ability are stimulated, and students are encouraged to explore different dance styles

and themes. The teaching method of combining education with entertainment is adopted to allow students to learn dance and creation in a relaxed and pleasant atmosphere. Students are encouraged to actively participate in classroom activities and strengthen their movement memory and creative ability through practice.

2.6.4 Follow the principle of artistry

Improvisational dance courses should focus on the dynamics and rhythm of dance, cultivate students' sense of music and rhythm, and cultivate students' aesthetic ability and artistic accomplishment through dance design and emotional expression.

2.7 Learning Management Theory in the 21st Century

2.7.1 Origin and importance

At present, there are various forms of learning management. In the 21st century, learners need to have learning arrangements so that they can work and live more effectively. Scholars have made many discussions on learning management. The situation in the 21st century is as follows:

Somkiat Tangkitwanit and colleagues (2013:13) elaborate on this importance by summarizing the contemporary education literature that points in the same direction: The skills and knowledge required for citizenship and employment in the 21st century are very different from those of the 20th century. Some skills are permanent in nature, that is, they are important in all times. Not just in the 21st century. The 4C skills are creative thinking. Critical thinking, communication, and teamwork. But these skills have changed in the digital world. Including increasing in importance until it becomes something you “must” have rather than something you “should” have, while some skills are seen as skills.

Warangkana Thongnoppakun concluded that 21st century learning is a strategic guide to organizational learning through the co-creation of models and

guidelines to improve the effectiveness of 21st century learning management, emphasizing knowledge and skills that are adapted to today's changing society. It will refer to the model developed by the 21st Century Learning Skills Network Partnership (Thongnoppakun and Yuenyong 2018).

2.7.2 The meaning and concept of learning management in the 21st century.

Wicharn Panich (2013: 16-21) proposed that knowledge management, as an economic term, refers to the use of management methods to program, process and standardize the learning process through planning, organization, leadership, control and other means, to create and update the best learning plan to achieve the purpose of efficient learning. This management method not only focuses on the content and effect of learning, but also emphasizes the systematicness and sustainability of the learning process.

Worapoj Wongkitrungruang and Atip Chittarek pointed out that in the 21st century, the concept of learning management has been further enriched and developed, emphasizing that all members of the organization, including decision makers, managers and operators, should be committed to learning (Wongkitrungruang and Jittarek 2013). This concept of full learning helps to improve the learning and innovation capabilities of the entire organization. Learning is no longer seen as an activity independent of work, but a process that is closely linked to and mutually infiltrated with work. Learning organizations emphasize learning in preparation, learning in planning, and learning in implementation, so that learning and work are seamlessly connected, forming a virtuous cycle of "learning is work, work is learning". Learning organizations not only attach importance to individual learning and the development of individual intelligence, but also emphasize group learning and the development of group intelligence. Through team learning, members can learn from each other, share knowledge, and solve problems together, thereby enhancing the overall learning ability and adaptability of the organization. Self-management is an important concept in the

theory of learning organizations. It encourages organizational members to self-discover problems, self-select partners, self-set goals, self-organize implementation, self-check results, and self-evaluate and summarize in their work. This management method is conducive to stimulating the enthusiasm and creativity of members and improving the overall effectiveness of the organization. Learning organizations emphasize the sharing and dissemination of knowledge. By establishing tools such as knowledge bases and knowledge maps, they integrate and share internal and external knowledge resources to promote the flow and value-added of knowledge. This knowledge sharing culture helps to enhance the overall wisdom and innovation capabilities of the organization. In the rapidly changing 21st century, continuous innovation is one of the core competitiveness of learning organizations. By constantly learning new knowledge, new technologies, and new methods, organizations can maintain keen market insight and strong innovation capabilities, thereby remaining invincible in the fierce market competition.

To sum up, the learning management concept in the 21st century emphasizes core elements such as full-staff learning, full-process learning, group learning, autonomous management, continuous innovation, and knowledge sharing. It aims to enhance the overall learning and innovation capabilities of the organization by building a learning organization to adapt to the rapidly changing market environment.

2.8 Research on Improvisational Dance

Improvisational dance is a dance form that triggers inner resonance under the stimulation of external factors and freely expresses emotions through body movements. It also points out that improvisational dance is mostly perceived and used by people. In major dance competitions, there are related propositional improvisations and music-related improvisational dances. The book also discusses the time and space power of improvisation, breathing methods, internal and external consciousness, and the concept of yin and yang in traditional Chinese philosophy. It makes extensive use of Chinese

philosophy, which provides strong theoretical support and practical significance for this article to study the three aspects of improvisational dance - time improvisation, space improvisation, and power improvisation (Sheng 2017).

Improvisational dance was first created by music educator Dalcroze who integrated body improvisation into music education, and explained two important driving forces for the emergence and development of improvisational dance: the openness and process of the body, and the democracy and individuality of the body (Lin 2017).

Improvisational dance is the behavior of dancers in various environmental experiences, and it is the true expression and release of inner and outer feelings. The specific characteristics, historical origins and functions of improvisational dance in various aspects are briefly explained. This further strengthened my determination to conduct research on improvisational dance. "Improvisational dance" originates from life, and deeply explores the influence of "improvisation" on dance creation. At the same time, he emphasized that music and improvisation are inseparable, and improvisers should have a good sense of music and be good at using music for improvisation (Liu 2015).

In the teaching of improvisational dance, teachers should not ignore the importance of inspiration, and should be good at using heuristic teaching to mobilize the inner emotions of the teaching objects and strengthen their creative desire. The article also mentioned the "from swimming" improvisational dance method to explore the power of time and space, emphasizing that in the teaching of improvisational dance, it is necessary to strengthen the scientific training of time, space, and power, strengthen the coexistence of body and dance thinking, and promote innovative development. Improvisational dance should guide students to learn to use music and develop their bodies, such as: liberating the body one by one, practicing in a specific space, etc. (Lü 2000).

Yang Yicheng elaborated on the teaching methods and implementation of improvisational dance choreography, and explained improvisational dance

choreography from the perspectives of time, space, and strength, providing me with an effective improvisational dance teaching method. The scholar emphasized the importance of improvisational dance and proposed measures to optimize teaching methods. She also mentioned that in the practice of improvisational dance teaching, students' perception of music should be strengthened (Yang 2014).

Fan Mengmeng explicitly mentioned the dialectical relationship between music and dance, and encouraged researchers to increase research on the cross-integration of art disciplines in the future. The article also elaborated on the training value and methods of improvisational dance. The article also conducted a sample survey and problem analysis, and found that there was very little information on improvisational dance research in China, and most foreign information had not been translated into Chinese for dancers to learn from. In addition, there is still a gap between the development of improvisational dance teaching in my country and Europe and the United States. Therefore, it is concluded that improvisational dance in my country is still in its infancy (Fan 2013).

Lu Yaowu mentioned that modern dance teaching in colleges and universities faces problems such as how to innovate connection technology and how to create. By exploring the functional impact and value significance of improvisational dance on modern dance teaching in colleges and universities, he pointed out that improvisational dance can build a suitable bridge between dance technology and creation, play a complementary role, inspire learners to find body language that suits them, develop creative body vocabulary, and cultivate the ability of tacit cooperation and cooperative learning among people, thereby improving professional quality (Lu 2013).

In summary, the above research articles or works on the concept and teaching of improvisational dance provide a theoretical basis for me to accurately grasp the concept of improvisational dance, and enable me to understand the historical origins, specific characteristics and functional roles of improvisational dance. At the same time,

understanding the current development status of improvisational dance teaching in my country provides an effective reference value for this paper to apply the Dalcroze teaching method to improvisational dance, which enables me to understand the existing improvisational dance methods and their value and significance, and inspires me to get inspiration from dance education and teaching methods, which provides ideas for my subsequent use of music teaching methods for improvisational dance teaching, and also provides theoretical support for the application of the Dalcroze teaching method to improvisational dance.



CHAPTER 3

RESEARCH METHOD

This chapter will describe in detail the research methods used in this study to ensure the systematic and scientific nature of the research process. First, this study uses a qualitative research approach to comprehensively explore the application of the Dalcroze teaching method in improvisational dance. In this process, a teaching plan will be designed to apply the Dalcroze teaching method to the improvisational dance teaching process.

3.1 Study design

This study aims to design an improvisational dance course for dance majors based on Dalcroze's "body rhythm" theory. The study adopts a mixed research method, combining quantitative analysis with qualitative research, and systematically completes the course design and verification work through four stages: theory construction, course development, expert verification, and practical testing. The research design focuses on the linkage of "music-body-emotion" and emphasizes the transformation process from auditory perception to kinesthetic expression in improvisational dance.

In terms of theoretical framework construction, this study integrates Dalcroze's educational philosophy and modern dance teaching methods, and establishes three core principles: first, the principle of linking music and body, establishing a corresponding relationship between music elements (note value, pitch, sound intensity) and dance movements (time, space, strength); second, the principle of integrating emotion and movement, realizing emotional externalization through scenario simulation and association method; third, the principle of layered creativity cultivation, adopting a step-by-step teaching design. These principles provide a theoretical basis for subsequent curriculum development.

The course development process adopts a modular design approach, dividing the teaching content into four modules: theoretical foundation and physical development, music perception and rhythm training, improvisation and emotional expression, and stage performance and teamwork. Each module has several teaching topics, and a total of 16 weeks of teaching content is designed. In terms of teaching methods, a combination of oral and hands-on teaching, video observation, heuristic teaching methods, and other methods are adopted, and digital technology is integrated into teaching. The evaluation system adopts a three-dimensional scoring standard, and conducts a comprehensive evaluation from the three dimensions of technical completion, musical fit, and artistic expression.

To ensure the scientificity and effectiveness of the course design, this study used IOC (content validity index) expert evaluation and focus group discussion to verify . Three IOC experts and five focus group experts were invited to score 23 indicators of the course design in the fields of dance education, dance choreography, and modern dance. The IOC values were calculated to test the content validity. A focus group composed of university dance education experts, primary and secondary school dance teachers, and professional dancers was organized to conduct in-depth discussions on the course structure, teaching methods, and evaluation system, and to put forward improvement suggestions. Based on expert feedback, the course design was dynamically revised and improved.

In the practice verification stage, this study selected dance students from the Art School of China Coal Mine Art Troupe as the research subjects and carried out a one-semester (16-week) teaching practice. Data was collected through three methods: daily observation, process evaluation, and final examination. Combined with quantitative scoring and qualitative analysis, the course implementation effect was comprehensively evaluated. Research tools included the IOC expert review form, three-dimensional

evaluation scales, etc. to ensure the comprehensiveness and accuracy of data collection.

3.2 Research subjects

This study selected 150 first-year high school students from China Coal Mine Art School as the research subjects. First, 30 people were randomly selected from the 150 people for pre-testing, and then 30 people were selected as samples through dance creativity test.

3.3 Research Methods

This study adopts qualitative research methods, comprehensively applies literature research, expert evaluation, and action research, and systematically carries out the design and verification of Dalcroze's body rhythm dance improvisation course. The organic combination of multiple research methods not only ensures the theoretical depth of the course design, but also ensures the feasibility of practical application.

Literature research method is mainly used in the stage of constructing theoretical foundation. By systematically combining the research literature on Dalcroze's music education theory, modern dance teaching method and improvisational dance, the core essence of "body rhythm" theory and its application value in dance education are deeply analyzed. Focus on the research results on the linkage mechanism between music and dance at home and abroad, as well as the successful cases of improvisational dance course design, to provide theoretical support and method reference for this study.

The expert evaluation method runs through the entire process of course design. Three dance experts (one dance education expert, one modern dance expert, and one dance choreography expert) were invited to form an expert panel to improve the course plan through three rounds of evaluation. The first round used the IOC (content validity

index) evaluation form to quantitatively score the 23 indicators of course design; the second round organized a focus group discussion to make qualitative suggestions on the course structure, teaching methods and evaluation system; the third round finalized the revised plan. Expert evaluation not only ensures the scientific nature of the course content, but also enhances the practical guidance of the plan.

3.4 Research Tools

This study uses a diversified research tool system to ensure the comprehensiveness and scientificity of data collection. The development of the research tool strictly follows the principles of educational measurement and is specially designed for the characteristics of improvisational dance courses.

3.4.1 Evaluation Form

The scoring standard system designed in this study plays a key role in quality monitoring and effect evaluation in the course development and implementation process. The standard constructs a systematic evaluation framework through three dimensions: technical quality (40 points), music processing ability (40 points) and student creativity (20 points), transforming abstract dance performance into quantifiable specific indicators. The technical quality dimension is subdivided into sub-items such as posture, foot movement, movement standard and texture ductility. The music processing ability focuses on the accuracy of rhythm, while the student creativity is comprehensively evaluated from the aspects of novelty of conception, movement creativity, emotional expression and choreography logic. This scoring standard not only provides an objective basis for formative evaluation in the teaching process, enabling teachers to accurately identify students' strengths and weaknesses, but also establishes a scientific measurement tool for the summative evaluation of course effects. By combining qualitative description with quantitative scoring, the standard effectively

balances the subjectivity of artistic expression and the objectivity of skill evaluation, ensuring the reliability of the evaluation results while taking into account the creative characteristics of dance art, providing important data support for the quality assurance and continuous improvement of Dalcroze's improvisational dance course.

Table 1 Evaluation criteria statistics

Scoring Criteria	
Technical quality (40 points)	<p>* If the posture is standard, the score is 8-10 points; if the posture is relatively accurate, the score is 5-7 points; if the posture is basically accurate and standard, the score is 2-4 points; if the posture is not standard, the score is 0-1 point.</p> <p>* If the foot movements are standard, the score is 8-10 points; if the foot movements are relatively standard, the score is 5-7 points; if the foot movements are basically standard, the score is 2-4 points; if the foot movements are not standard, the score is 0-1 point.</p> <p>* If the movements are standard, the score is 8-10 points; if the movements are relatively standard, the score is 5-7 points; if the movements are basically standard, the score is 2-4 points; if the movements are not standard, the score is 0-1 point.</p> <p>* The texture and ductility are very good, with a score of 8-10 points; the texture and ductility are good, with a score of 5-7 points; the texture and ductility are average, with a score of 2-4 points; the texture and ductility are poor, with a score of 0-1 points.</p>
Music processing ability (40 points)	<p>* If the beat is accurate, the score is 16-20 points; if the rhythm is relatively accurate, the score is 11-15 points; if the rhythm is average, the score is 6-10 points; if the rhythm is inaccurate, the score is 0-5 points.</p> <p>* If the rhythm is good, the score is 16-20 points; if the rhythm is good, the score is 11-15 points; if the rhythm is average, the score is 6-10 points; if the rhythm is bad, the score is 0-5 points.</p>

Table 1 (Continued)

Student creativity (20 points)	* Creative conception: 5 points: The conception is novel and unique, and can accurately understand and express the emotions and artistic conception of the music or theme.
	* Action design: 5 points: The movements are smooth, coordinated, creative, and can accurately express emotions and artistic conception.
	* Emotional expression: 5 points: The emotional expression is accurate, contagious, and can resonate with the audience.
	* Dance choreography 5 points: The dance choreography is reasonable and coherent, with a strong sense of rhythm and natural and smooth transitions between each part.

3.4.2 Dance Creativity Scale

Testing dance creativity is a complex and detailed process that requires the design of a dance creativity scale to assess the subject's ability and performance in the creative process.

Table 2 Creativity Rating Scale

aspect	question	Corresponding score				
		Always (5 points)	Often (4 points)	Sometimes (3 points)	Rarely (2 points)	Never (1 point)
Creative thinking skills	1. Ability to put forward unique viewpoints and innovative ideas in dance creation.					

Table 2 (Continued)

	2. When encountering difficulties or challenges in dance performance or creation, maintain a flexible mindset and seek solutions from different angles.
	3. Frequently come up with new ideas and concepts in daily dance performances and practice.
Creative expression ability	1. Create influential works or achievements in the field of dance
	2. Often get inspiration from dance videos, performances and other fields, and apply it to dance creation.
	3. Ability to collaborate with dance partners to unleash creativity and achieve good results.
	4. Have strong creativity and be able to communicate with dance teachers to achieve good results.

4.4.3. Expert evaluation and adjustment

During the development of the tool, three PhDs in education and directing were invited to evaluate it. These experts will review the content of the tool. The specific evaluation process is as follows:

To evaluate the content validity of the tool, experts will score it based on the following criteria:

+1: If the expert confirms that the content is consistent with the research content and objectives, and believes that the question can effectively measure the required content.

0: If the expert is uncertain about the suitability of the content, it is considered that the question may not effectively measure the required content.

-1: If the expert confirms that the content does not meet the research content and objectives, it is considered that the question cannot measure the required content.

The results of the expert ratings will be used to calculate the item objective consistency (IOC) to ensure that the design of each question is consistent with the overall goal of the study. The calculation method of item objective consistency is as follows:

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

Among them, IOC represents the consistency of the goal of each question, $\sum R$ is the sum of the evaluation scores of each question by experts, and N is the number of experts involved in the review. Each expert will give a score for the relevance of the question to ensure that the design of the tool meets the teaching objectives.

CHAPTER 4

DATA ANALYSIS

According to the research objectives, this chapter designs a body rhythm improvisation dance course suitable for dance majors in art colleges based on Dalcroze's educational philosophy, focusing on the specific implementation path of course design and development. The course design integrates the creativity cultivation in the 21st century educational concept and the core principles of Dalcroze's teaching method. Through systematic "auditory-kinesthetic" transformation training, phased ability training and multi-evaluation system, a complete improvisation dance teaching framework is constructed. The study uses a combination of IOC expert evaluation and focus group discussion to scientifically verify the course content, teaching methods and evaluation system, and optimizes and adjusts the course design based on expert feedback, including strengthening the correspondence between music and dance elements, improving the phased improvisation training module and introducing digital teaching methods, thereby ensuring the scientificity and effectiveness of the course design. The final course plan not only solves the problems of disconnection between music and movement and insufficient emotional expression in traditional improvisation dance teaching, but also provides an operational teaching paradigm for cultivating dance talents with innovative ability.

4.1 Instructional Design

4.1.1 Teaching objectives

In the process of teaching improvisational dance, the "body rhythm" music teaching method is used to carry out teaching, guiding students to listen to music and generate emotional resonance. After the students' brains rationally analyze the musical elements, they develop figurative thinking of movements through association

and imagination, activate the kinesthetic perception of the limbs to improvise boldly, and encourage students to actively build a "bridge" between body and spirit.

The specific teaching implementation is through the relationship between the three elements of music in body rhythm, namely note value, pitch, and sound intensity, and the three elements of dance, namely time, space, and force, which act on students' auditory and visual organs, help to improve the sensitivity of sensory organs; stimulate inner emotional expression; strengthen independent innovation awareness; cultivate coordinated development of body and mind, etc., to promote students' all-round development at multiple levels, in multiple aspects, and from multiple angles.

4.1.2 Teaching Target

The first-year high school dance students of the China Coal Mine Art Troupe Art School are the subjects of improvisation dance teaching. In the first year of high school, students have accumulated a certain amount of dance language materials, and their physical fitness and various functions are relatively good. If they are trained in modern dance improvisation courses, they will be able to master the methods of improvisation dance and have the ability to improvise dance.

4.1.3 Teaching methods

(1) Oral and hands-on teaching

The oral and hands-on teaching method is an effective means to systematically spread dance culture. It is widely used in dance education and teaching activities. It includes two aspects: oral explanation and demonstration. When "body rhythm" is used in the process of improvisational dance teaching, teachers need to explain the relationship between music elements and dance elements so that students can understand the connection between the two. And teachers demonstrate the body's movements and reactions at different times, different spaces, and different forces according to different music elements.

(2) Video observation method

Video observation is a product of the rapid development of modern information technology, which has greatly enriched the means of modern education and teaching. In the process of improvisational dance teaching, teachers collect and organize high-quality teaching videos about body rhythm and improvisational dance and play them for students to watch. On the one hand, students can have a preliminary understanding of body rhythm and improvisational classes visually. On the other hand, teachers can absorb more excellent teaching skills, methods and forms by watching videos. In addition, when students use music elements to practice dance improvisation independently after class, they can consciously record videos, so that they can not only watch their own improvisational movements repeatedly, but also communicate with classmates and discover more physical possibilities.

(3) Heuristic teaching method

Heuristic teaching is to impart knowledge to students in an inspiring and inductive way, following the modern teaching guiding ideology of "students as the main body and teachers as the leader". Therefore, this teaching method has become an indispensable and important part in the teaching process, so as to cultivate students' active learning ability and promote their physical and mental development. In the process of improvisational dance teaching, teachers use the body movement vocabulary in the "body rhythm" music teaching method to inspire students' sensitivity to note value, pitch, and sound intensity, induce students to switch from hearing to kinesthetic sense, and improvise time, space, and strength within the specified range, thereby opening the box of the body and continuously developing body movements.

(4) Scenario simulation method

The situational simulation method in dance teaching usually gives students a specific situation or environment and makes them dance in the situation. For example, using bass to do ground space improvisation requires students to fully trust the ground and have their bodies fit deeply with the ground. At this time, using the

situational simulation method, imagine that the ground and the body are integrated, and the ground will not be the ground, but a part of your body, so that you can improvise more firmly.

(5) Association method

Association is the basis of imagination, and imagination is the re-creation of association. The formation of dance movements must go through dance image thinking, which requires students to have a certain artistic imagination. For example: using weaker sounds to improvise softly, teachers need to guide students to associate and imagine, associate their own weight with feathers, and imagine floating in the universe. Students can follow the changes in the strength of the sound, and the strength of the improvisational movements will also change accordingly.

4.1.4 Teaching plan

The starting point of the body rhythm teaching process is listening to music or rhythmic sounds. Students listen carefully to the elements in the music, integrate feelings and emotions into the movement, thereby producing body movements to trigger kinesthetic responses.

According to the book "Music Teaching in the 20th Century", the teaching process of body rhythm is described as the following four stages. As shown in the following table.

Table 3 Teaching plan design table

time	stage	content	Target	method
Week 1-2	Basic preparation stage	a Introduce the Dalcroze	build	Oral Teaching and Video Observation
		teaching method and its core	fundamental	
		element "body rhythm".	connections	
		b Show the charm of	between music	
		improvisational dance	and dance and	
		through video or live	improve body	

Table 3 (Continued)

		demonstration.		
		c. Practice simple body movements, such as nodding and swaying to the rhythm of the music, to guide students to feel the connection between their bodies and music.	flexibility.	
		a. Basic knowledge: whole note, half note, quarter note, etc.		
		b. Listen to music and identify note values: Play music with different note values and let students try to identify and imitate them.	Enhance students' perception of music rhythm and melody.	Heuristic teaching method, scenario simulation method
Week 3-4	Music perception training phase	c. Adjust the duration of dance movements: adjust the duration of dance movements according to the changes in the note values in the music to make the dance more rhythmic.		
		d. Use body movements to express the rhythm of the music (such as clapping, stepping, etc.).		

Table 3 (Continued)

Week 5-6	Physical exercise deepening stage	Learn more complex body movements (such as spinning and jumping). Combine music with continuous body movement exercises.	Improve body rhythm and make movements more fluid and natural	Oral and associative teaching method
Week 7-8	Basic training stage of improvisational dance	Learn how to respond quickly to changes in the music. Basic ways to express emotions using body language.	Master the basic techniques of improvisational dance	Heuristic teaching method, scenario simulation method
Week 9-10	Improvisational dance practice stage	Set a theme or situation and guide students to improvise dance. Work in groups to create dance pieces together.	Encourage students to create boldly and enhance their creativity	Association method, image observation method
Week 11-12	Performance Preparation	Perfect your dance work, adjusting movements and details.	Getting ready for the final show	Oral Teaching
Week 13-14	Rehearsal stage	Conduct stage rehearsals and become familiar with the stage environment.	Prepare for the final performance and improve your expressiveness.	Scenario simulation

Table 3 (Continued)

Week 15-16	Results display and evaluation stage	The students performed an impromptu dance performance.	Demonstrate learning outcomes and conduct comprehensive assessments	Performance evaluation methods, self- evaluation methods
		Teachers and classmates evaluate performance and make suggestions for improvement.		

4.2 Theoretical Application and Design Concept

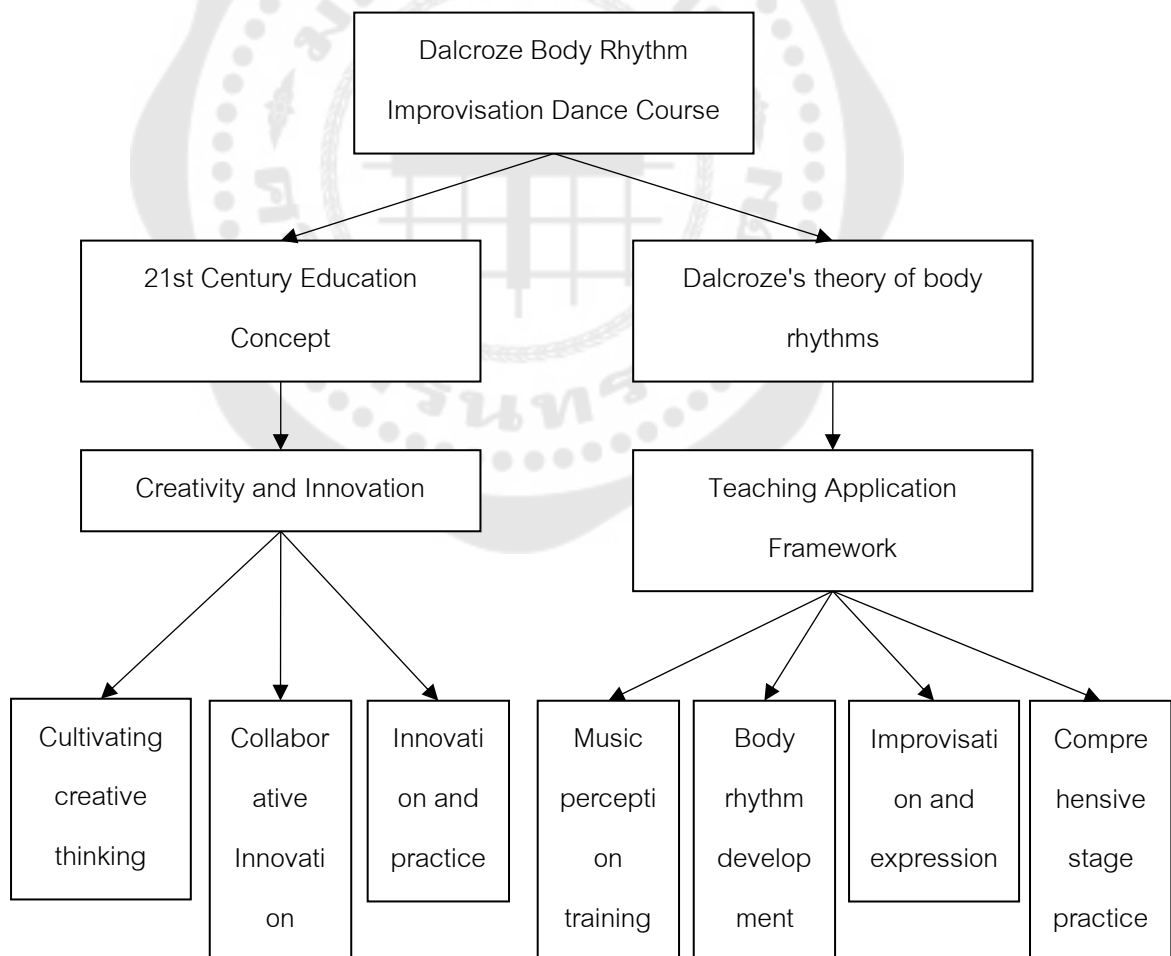


Figure 1 Theoretical application structure diagram

4.2.1 Application of 21st century education concepts

1) Cultivation of creative thinking

Creative thinking is an important part of the core literacy of the 21st century. In the design of the Dalcroze Body Rhythm Improvisation Dance Course, the cultivation of creative thinking is mainly reflected in the development of students' ability to transform musical elements into personalized body expressions. The course strictly follows the Dalcroze core principle of "hearing before action" and guides students to complete the creative transformation from music perception to body expression through systematic training methods. Specifically, students need to first deeply deconstruct and reconstruct the music structure, such as transforming long note values into extended movements and short note values into quick response movements. This transformation process itself is a manifestation of creative thinking. In the improvisation stage, the course particularly emphasizes the innovative combination and application of the three major dance elements of time, space, and power, requiring students to explore personalized movement expressions based on the internal logic of music. This training not only cultivates students' artistic intuition and aesthetic judgment ability, but more importantly, develops the thinking ability and creative ability necessary for the 21st century education concept, and realizes the organic unity of auditory perception and kinesthetic expression. This ability training is highly consistent with the talent development goals of the 21st century, enabling students to exercise critical thinking and innovation abilities in artistic creation.

2) Collaborative innovation practice

As an important part of the course, collaborative improvisation fully reflects Dalcroze's educational concept of "collective rhythm". The course has designed a multi-level collaborative innovation training system. Starting from the basic rhythm dialogue exercises, students need to use their bodies as a medium to conduct non-verbal rhythm interactions. This training focuses on cultivating students' communication

skills in the absence of language communication. In the group improvisation session, through innovative forms such as "theme relay", such as emotional transmission and space conversion exercises, students need to quickly understand and respond to their peers' movement intentions, while maintaining their personal style and achieving overall harmony. As the highest stage of collaborative training, the collective work performance requires students to organically integrate their personal creativity and complete structured improvisation. This step-by-step collaborative training model not only cultivates students' team spirit, but more importantly, develops non-verbal communication skills, quick response capabilities, and the ability to maintain individual expression in the group, which are emphasized by 21st century education. This collaborative model not only strengthens students' physical expression ability, but also cultivates their open-minded thinking and team adaptability, laying the foundation for future art education or professional cooperation.

3) Closed loop of innovation and practice

As a practical subject, dance emphasizes the complete chain from conception to action. The course encourages students to implement innovative thinking: through improvisation, experimental improvisation and performance, students can experience the whole process from creative germination to stage presentation. In this process, students need to face the balance between technical challenges and artistic expression, so as to develop the ability of "reflection-improvement-re-practice". This practice-oriented innovation training not only improves students' artistic execution, but also shapes their resilience in dealing with complex problems in the future.

4.2.2 The use of Dalcroze's "body rhythm" theory

1) Music perception training

Dalcroze's "body rhythm" theory emphasizes the linkage between music and the body, and music perception training is the basic part of the course. At this stage, students develop sensitivity to music by listening to elements such as rhythm, melody,

and pitch in music. Teachers guide students to transform auditory information into body movements, such as clapping and stepping to express the duration of different notes (such as whole notes, half notes, quarter notes, etc.). This training not only helps students establish the correspondence between music and movement, but also improves their understanding of music structure. In addition, combined with multi-sensory teaching methods (such as visual cues and tactile feedback), students' music perception ability is further strengthened, laying the foundation for subsequent improvisation.

2) Body rhythm development

Body rhythm development is the core practical part of the "body rhythm" theory. At this stage, students internalize musical elements into natural body expressions through systematic body training. For example, music with long note values corresponds to stretching and continuous movements, while music with short note values stimulates quick and flexible responses. Teachers help students master body control and sense of rhythm by designing progressive exercises (such as from single body movements to whole-body coordinated movements). At the same time, combined with strength training (such as explosive power and control exercises for strong and weak sounds), students can accurately express the dynamic changes of music through movements. This link not only improves students' physical coordination, but also enhances their ability to express musical emotions physically.

3) Improvisation and expression

Improvisation and expression is the application stage of the "body rhythm" theory. On the basis of the first two stages, students integrate music and emotions into improvisational movements through methods such as scenario simulation and association. Teachers set themes or situations (such as "nature" and "emotion") and guide students to freely create dance segments according to the changes in music. For example, express the burst of power in the strong part and show delicate emotions in

the weak part. This process encourages students to break through fixed movement patterns and explore personalized dance language. At the same time, through group cooperation and improvisation exercises, students' teamwork ability and creative interaction awareness are cultivated to make improvisational dance more expressive and artistically appealing.

4) Comprehensive stage practice

Comprehensive stage practice is the final presentation of the "body rhythm" theory. Students apply what they have learned in class to simulated or real stage environments, and demonstrate their comprehensive abilities in music perception, body rhythm, and improvisation through complete works. Teachers guide students to use elements such as stage space, lighting, and audience interaction to enhance the sense of hierarchy and expressiveness of performances. For example, in stage rehearsals, students need to adjust the intensity and rhythm of their movements according to the ups and downs of the music to ensure that the dance and music fit perfectly. This link not only tests students' learning outcomes, but also improves their stage confidence and on-the-spot adaptability, laying a solid foundation for future dance performances or teaching practices.

Through the systematic training of the above four links, Dalcroze's "body rhythm" theory has been fully applied in the improvisational dance course, realizing the organic integration of music, body and emotion, and effectively improving students' comprehensive artistic literacy.

4.3 Course Design Process and Steps

4.3.1 Analysis of the research objects of the course

This course is designed for the tenth grade students of the China Coal Mine Art Troupe Art School. According to the setting of developmental psychology, students in this grade are between 15 and 17 years old, belonging to the early

adulthood in developmental psychology, and their psychological and physiological development has reached a mature level. This stage is an important period of personal growth and development. Students not only need to study professional knowledge in depth during this period, but also need to prepare for future career development. For students majoring in dance, they have more flexible physical fitness and more active thinking. On the premise of studying the basic courses of dance major in the early stage, they have accumulated certain professional dance skills and theoretical knowledge, and have strong body control, music perception and dance expression.

Based on the above analysis, it is necessary to adopt diversified teaching methods for students of this age group, change the traditional "teacher-led" teaching model, and focus on cultivating students' independent learning ability and creativity. The improvisational dance course introduces the "body rhythm" training in the Dalcroze teaching method, combines music perception, emotional expression and improvisation, and helps students explore unique dance language and style. At the same time, the course also improves students' stage performance and teamwork ability through the creation and performance of improvisational dance, laying the foundation for their career development.

In the course design, teachers will use a variety of teaching methods such as heuristic teaching, situational simulation, and association to guide students to express emotions and explore the possibilities of movements through improvisational dance, and encourage them to incorporate their personal style into dance creation. In addition, the course will also introduce rich educational resources such as music, videos, and dance appreciation to help students broaden their artistic horizons and stimulate their interest in learning and creativity.

Through the study of improvisational dance courses, students can not only improve their dance skills and improvisation ability, but also develop

comprehensively in terms of emotional expression, teamwork and stage performance, which will provide strong support for their future dance career and personal growth.

4.3.2 Step design of course teaching content

The teaching content design of improvisational dance courses usually starts from basic body perception and music perception, and gradually transitions to the creation and performance of improvisational dance. Through systematic training, students can not only improve their dance skills, but also cultivate their creativity, music perception and stage performance. The course design focuses on the combination of theory and practice, and emphasizes students' active participation and creative expression.

The course includes eight major themes and thirty minor themes, as follows (see the table below for details):

Table 4 Dance course

Serial number	theme	content
1	Basic theory of improvisational dance	<ul style="list-style-type: none"> - Definition and characteristics of improvisational dance - History and development of improvisational dance - Relationship between improvisational dance and music - Creative principles and forms of expression of improvisational dance
2	Body perception and development	<ul style="list-style-type: none"> - Perception and awakening of various parts of the body - Body flexibility and coordination training - Body strength and explosive power training - Interaction exercises between body and space

Table 4 (Continued)

		<ul style="list-style-type: none"> - Basic knowledge of music rhythm (whole note, half note, quarter note, etc.)
3	Music perception and rhythm training	<ul style="list-style-type: none"> - Combination of music rhythm and body movements - Correspondence between the expression of music emotion and dance movements - Music improvisation exercises
4	Basic techniques of improvisational dance	<ul style="list-style-type: none"> - Basic elements of improvisational dance movements (walking, running, jumping, spinning, etc.) - Practice of decomposing and combining movements - Combination of movement and emotion - Combination of movement and space
5	Improvisational dance creation method	<ul style="list-style-type: none"> - Motivation and theme selection for improvisational dance - Practice of movement variation and development - Improvisational use of time, space and power - Composition of dance sentences and paragraphs
6	Emotional expression through improvisational dance	<ul style="list-style-type: none"> - Exercises to combine emotions and movements - Express different emotions (joy, anger, sadness, etc.) through improvisational dance - Exercises to match emotions with music - Emotion, music and movement complement each other
7	Improvisational dance performance	<ul style="list-style-type: none"> - Utilization of stage space and improvisational dance - Interaction between improvisational dance and audience - Stage scheduling and expressiveness training of improvisational dance

Table 4 (Continued)

8	Teamwork in improvisational dance	- Group improvisational dance creation
		- Improvisational dance practice in teamwork
		- Role allocation and interaction in improvisational dance

The eight major themes of improvisational dance course design and development follow the concept of student-centeredness, comprehensive development, interdisciplinary integration and creativity cultivation, while also following the development principles of systematicity, practicality, fun, personalization, artistry and comprehensiveness.

4.3.2.1 Clarify teaching objectives

When designing improvisational dance courses, it is necessary to clearly define quantifiable teaching objectives, such as improving students' body flexibility, coordination, and expressiveness. It is necessary to focus not only on improving students' dance skills, but also on cultivating students' emotional expression and aesthetic ability. According to the professional abilities that students should master, it is divided into four parts, namely theoretical foundation and physical development, music perception and basic skills, creative methods and emotional expression, and stage performance and teamwork.

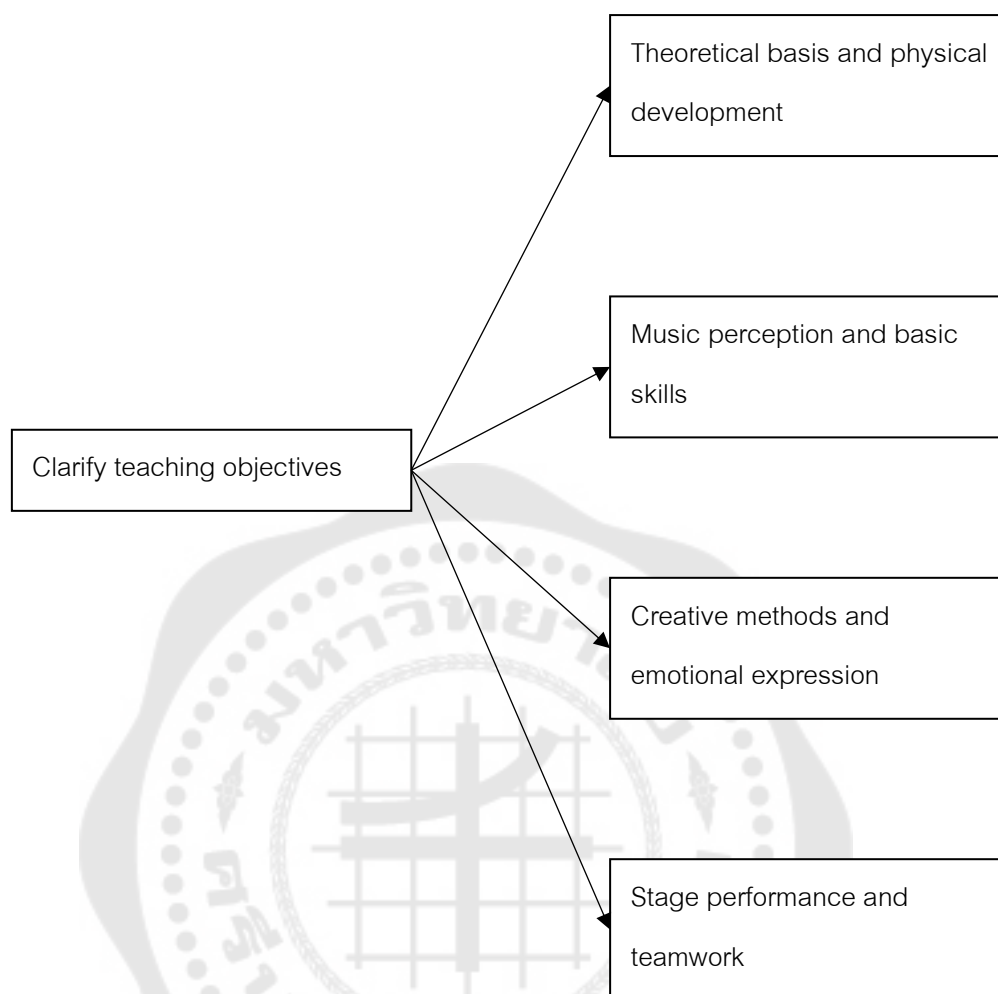


Figure 2 Clarifying the teaching objectives of the improvisational dance course

Theoretical foundation and physical development: establish the theoretical foundation and physical ability of improvisational dance.

Music perception and basic skills: Strengthen the combination of music and dance and master basic skills. Through the combination of music and movement, enhance students' sensitivity to rhythm, melody and harmony. Through a variety of movement exercises, improve body coordination and flexibility.

Creative methods and emotional expression: Cultivate improvisation and emotional expression skills. Help students express their emotions better through dance and music.

Stage performance and teamwork: Improve stage performance and teamwork skills.

4.3.2.2 Achieving teaching objectives

Based on the understanding of learning outcomes, the basic goals of teaching are clarified, so that teaching content can be formulated according to the goals to achieve learning outcomes and design requirements for how to achieve improvisational dance learning outcomes . Based on the core concept of the Dalcroze teaching method, eight teaching modules are designed: basic theory of improvisational dance, body perception and development, music perception and rhythm training, basic skills of improvisational dance, improvisational dance creation methods, emotional expression of improvisational dance, stage performance of improvisational dance, and teamwork of improvisational dance. These modules help students master the skills and methods of improvisational dance through the combination of body and music, improvisation, emotional expression and teamwork, and cultivate their music perception, creativity, emotional expression and stage performance, and ultimately achieve the learning outcomes of the improvisational dance course.

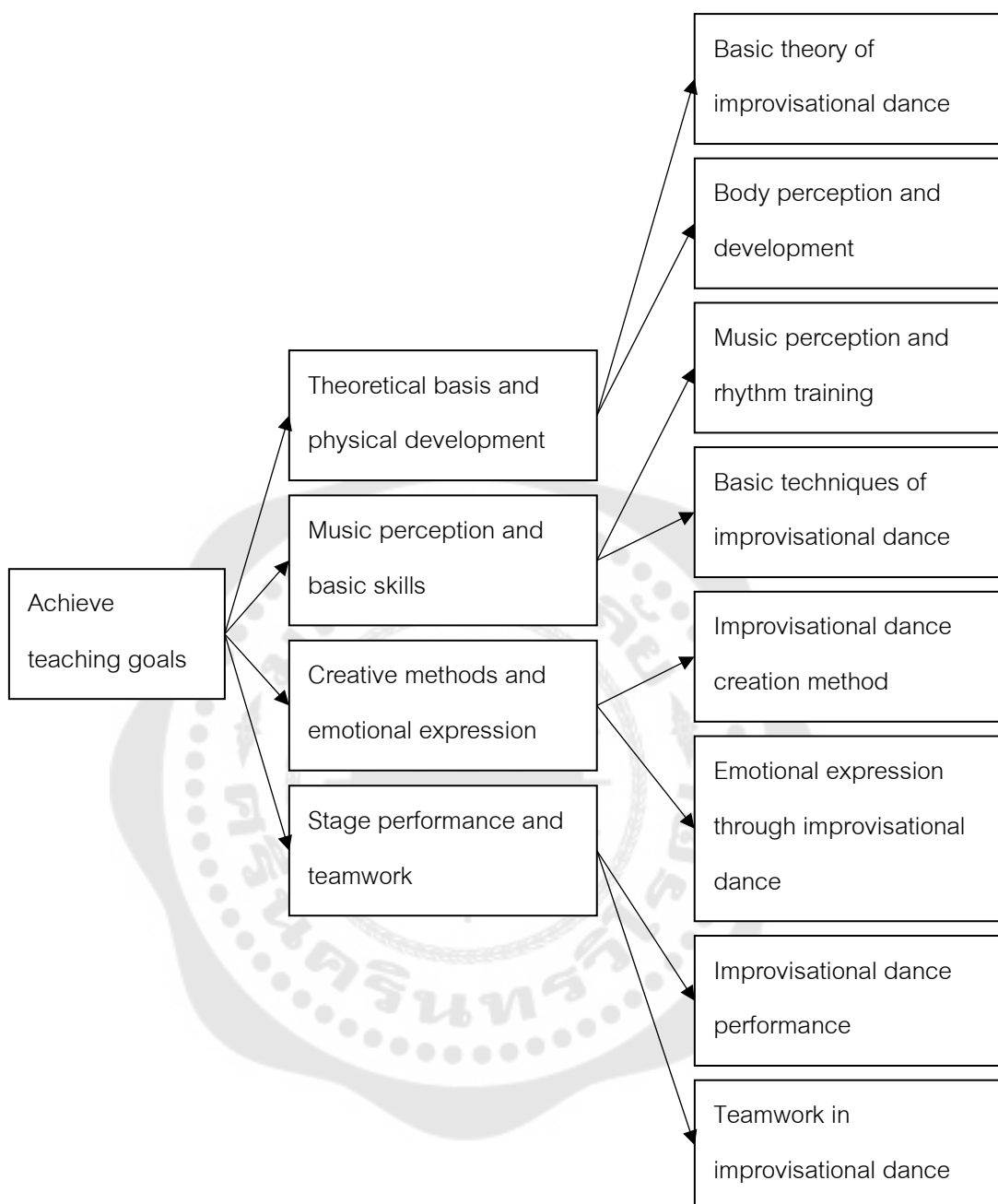


Figure 3 Design to achieve improvisational dance learning outcomes

1) Theoretical basis and physical development teaching module
teaching content theme design

The teaching content, which aims at theoretical foundation and physical development, is mainly divided into two modules: one is the basic theory of improvisational dance, and the other is body perception and development. The

theoretical learning of these two modules is mainly to help students establish clear theoretical knowledge and provide theoretical guidance for subsequent improvisational dance creation.

The basic theory of improvisational dance covers the definition and characteristics of improvisational dance, its history and development, its relationship with music, as well as its creative principles and forms of expression. Improvisational dance is a form of dance that does not rely on pre-choreographed movements and emphasizes immediate response and personal expression. Its history can be traced back to the introduction of the Dalcroze teaching method and has continued to evolve with the development of modern dance. The relationship between improvisational dance and music is inseparable, emphasizing the expression of the rhythm, melody and emotion of music through body movements. In terms of creative principles and forms of expression, improvisational dance focuses on the use of time, space and force, and has various forms of expression, which can be either individual improvisation or collective improvisation. The following figure shows the course theme of the basic theory of improvisational dance:

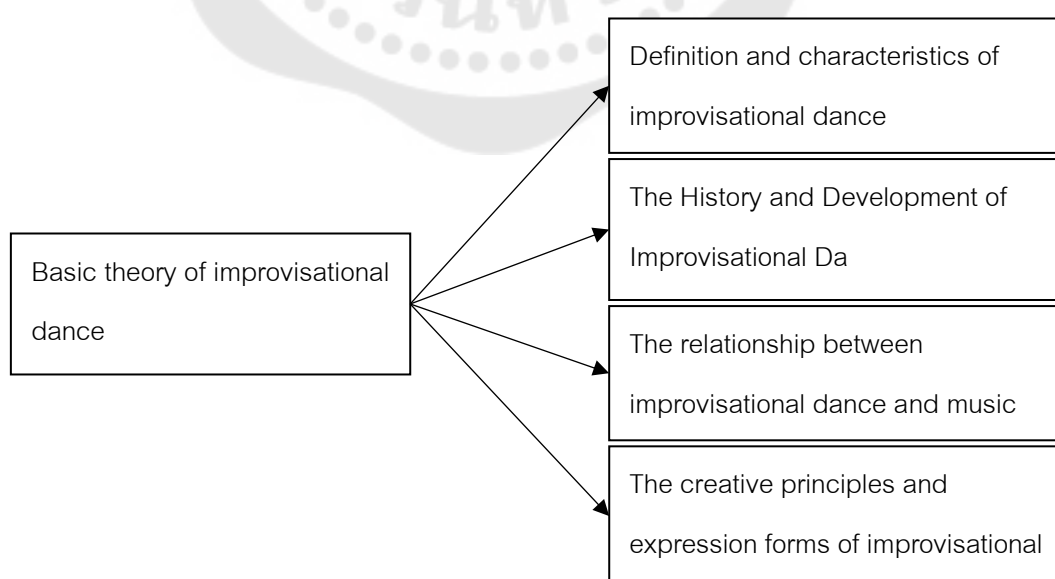


Figure 4 Course topics for the basic theory of improvisational dance

Body perception and development is an important part of the improvisational dance course. Through the perception and awakening of various parts of the body, flexibility and coordination training, strength and explosiveness training, and interactive exercises between the body and space, it helps students awaken the sensitivity and flexibility of the body, enhance body control ability, and understand the relationship between the body and space, laying a solid physical foundation for the creation and performance of improvisational dance. The following picture is a display of the course theme of body perception and development:

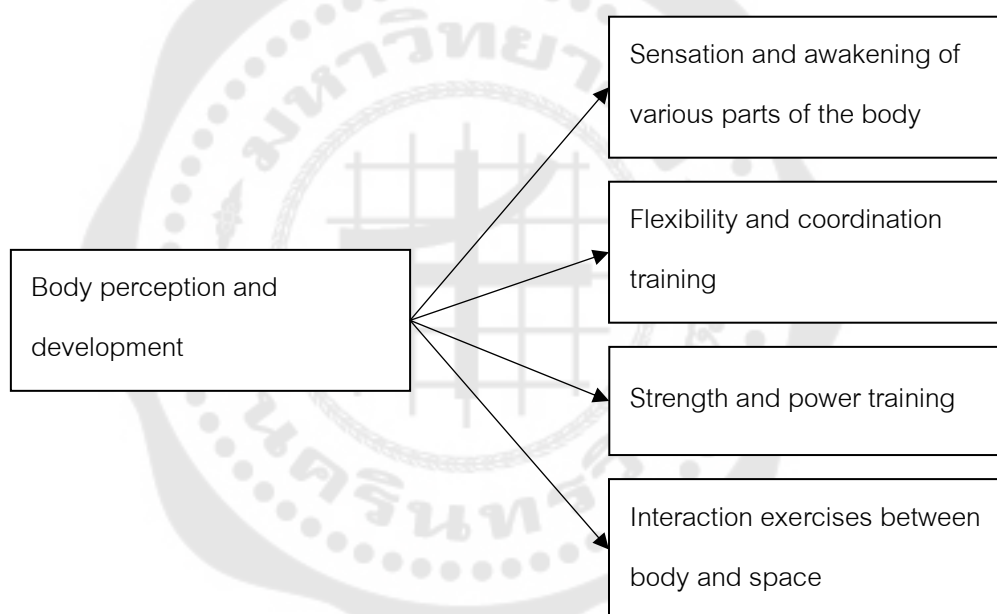


Figure 5 Course topics on body perception and development

2) Theme design of the teaching content of the music perception and basic skills teaching module

The teaching content aimed at music perception and basic skills is mainly divided into two modules: one is music perception and rhythm training, and the other is basic improvisational dance skills. These two modules complement each other, strengthening students' ability to perceive music and improving their dance skills and

expressiveness, providing strong support for the comprehensive development of improvisational dance.

The music perception and rhythm training module starts with the basic knowledge of music rhythm (such as whole notes, half notes, quarter notes, etc.) to help students establish a preliminary understanding of music rhythm. Through the combination of music rhythm and body movements, it guides students to express the rhythm of music with their bodies, and further deepens the correspondence between the expression of music emotions and dance movements, so that students can convey the emotions in music through dance movements. After music improvisation exercises, students are encouraged to apply the rhythm knowledge and emotional expression skills they have learned to improvisation, thereby comprehensively improving their music perception and dance expression. This module is progressive, gradually guiding students from theory to practice, and finally achieving a deep integration of music and dance. The following figure is a display of the course theme of music perception and rhythm training:

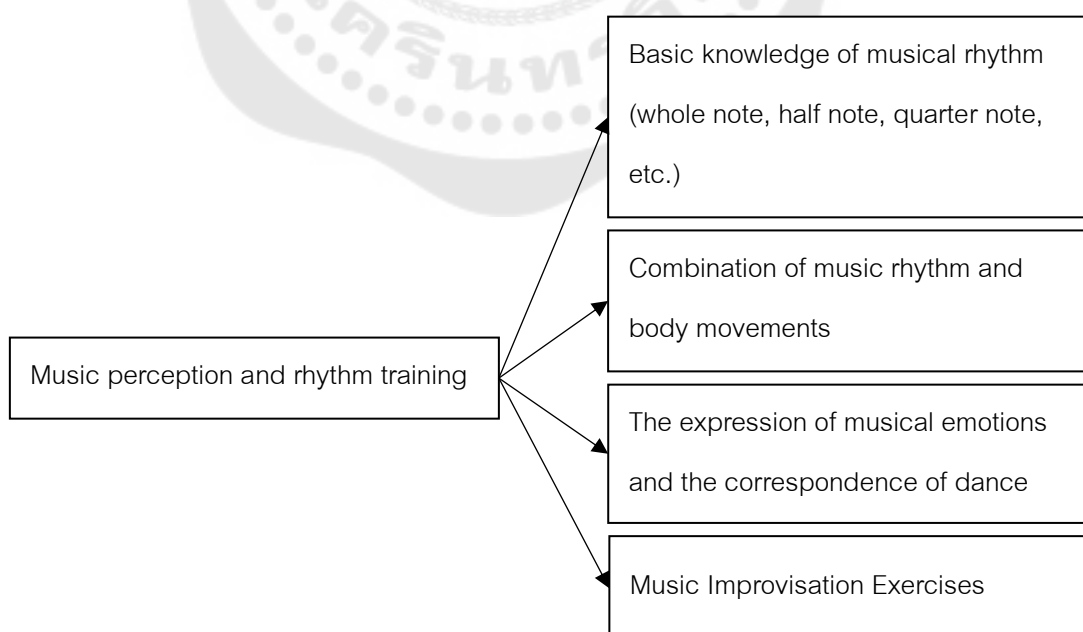


Figure 6 Course topics for music perception and rhythm training

On basic improvisational dance skills starts with the basic elements of improvisational dance movements (such as walking, running, jumping, spinning, etc.) to help students master the basic framework of dance movements; through the decomposition and combination of movements, guide students to deeply understand the structure and changes of movements; further combine the expression of movements and emotions, so that students can convey emotions through dance movements; finally, through the combination of movements and space, help students understand the relationship between body and space and improve their stage performance. This module gradually deepens students' improvisational dance skills from basic movements to emotional expression and then to the use of space. The following figure shows the course theme of basic improvisational dance skills:

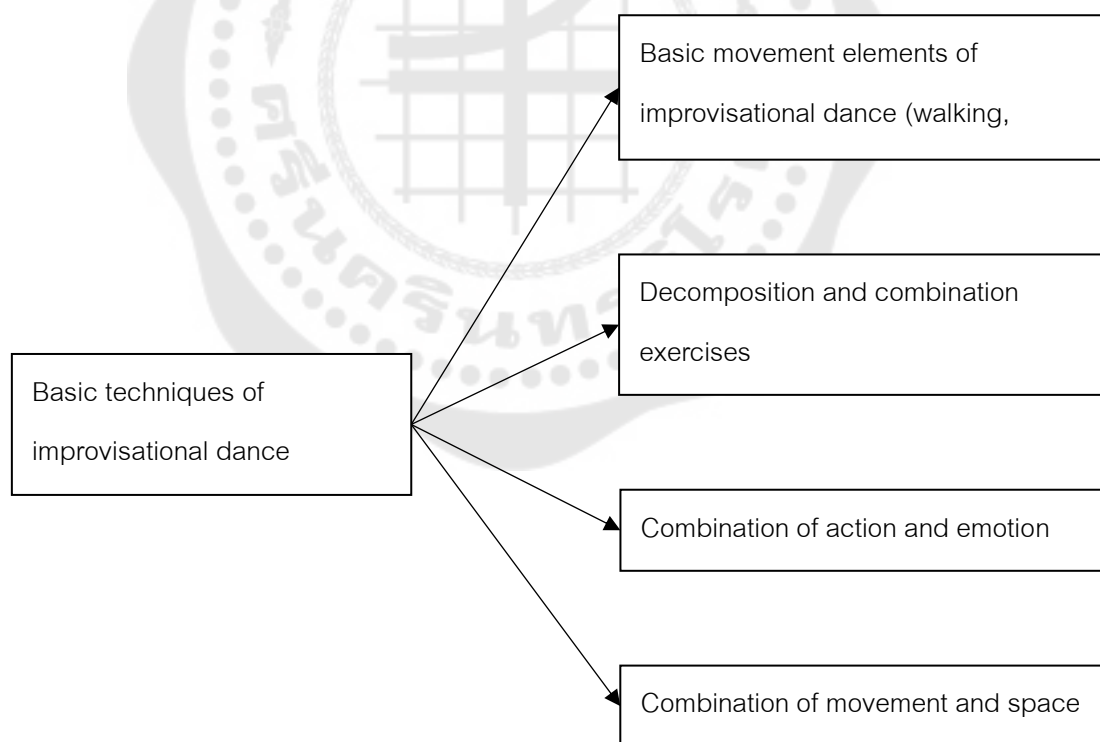


Figure 7 Course topics for basic improvisational dance techniques

3) Theme design of teaching content for the creative method and emotional expression teaching module

The teaching content, which aims at creative methods and emotional expression, is mainly divided into two modules: one is the creative method of improvisational dance, and the other is the emotional expression of improvisational dance. It focuses on the creative skills of improvisational dance and emphasizes the depth of emotional expression, helping students to comprehensively improve their improvisational dance abilities from technology to art.

The module on improvisational dance creation methods starts with the creative motivation and theme selection of improvisational dance, helping students to clarify the direction and intention of creation; through the practice of movement changes and development, guiding students to explore the diversity and possibilities of movements; further combining the improvisational use of time, space and force, so that students can flexibly use these elements in their creation and enrich the expression of dance; finally, through the composition of dance sentences and paragraphs, helping students master the structural design of dance works to make the creation more complete and coherent. This module cultivates students' improvisational creation ability through progressive training, helping them to gradually master the creation skills of improvisational dance from a single movement to the construction of a complete work. The following figure is a display of the course theme of improvisational dance creation methods:

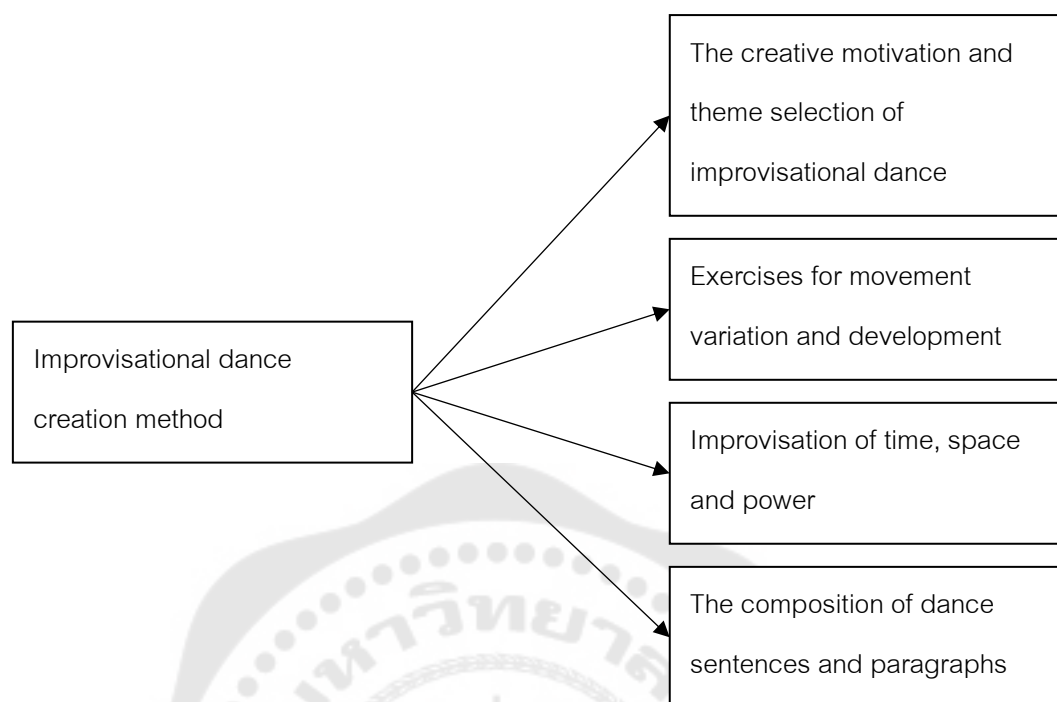


Figure 8 Course topics for improvisational dance creation methods

The emotional expression module of improvisational dance starts with the combination of emotion and movement exercises to help students understand how emotions are conveyed through dance movements; express different emotions (such as joy, anger, sadness, etc.) through improvisational dance, and guide students to explore the diversity and depth of emotional expression; further combine the corresponding exercises of emotion and music, so that students can transform the emotions in music into dance movements and enhance the expressiveness of dance; finally, through the complementary training of emotion, music, and movement, help students achieve the organic integration of emotion, music, and movement, making dance works more appealing and artistic. This module cultivates students' emotional expression ability through systematic training, helps them convey emotions through improvisational dance, and enhances the artistic expression of dance. The following figure is a display of the course theme of emotional expression of improvisational dance:

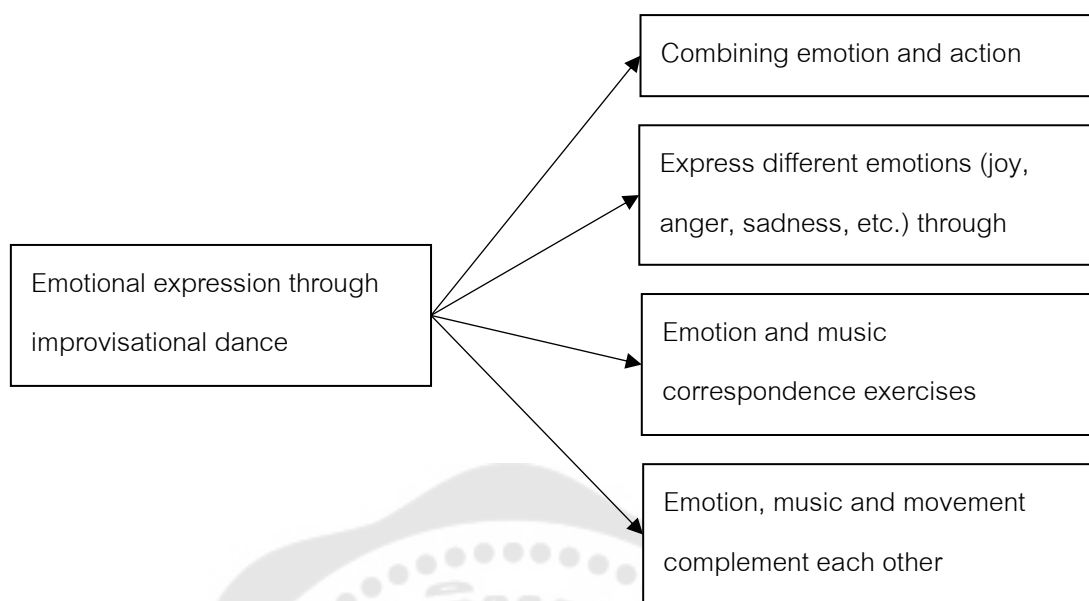


Figure 9 Course topic on emotional expression in improvisational dance

4) Theme design of teaching content for the stage performance and teamwork teaching module

The teaching content, which aims at stage performance and teamwork, is mainly divided into two modules: one is the stage performance of improvisational dance, and the other is teamwork in improvisational dance. It helps students master the skills of stage performance, improve their stage performance and self-confidence, cultivate students' teamwork ability and role allocation awareness, and enhance their collaborative ability in collective creation. It not only focuses on improving personal stage performance, but also emphasizes the importance of teamwork, helping students to achieve an organic combination of individual and collective in improvisational dance, laying a solid foundation for future dance performance and creation.

The stage performance module of improvisational dance helps students understand how to use space reasonably on the stage and enhance the visual effect of dance through the use of stage space and improvisational dance; through the interaction between improvisational dance and the audience, it guides students to learn

to establish emotional connections with the audience and enhance the appeal of the performance; finally, through the stage scheduling and expressiveness training of improvisational dance, it cultivates students' stage scheduling ability and expressiveness, making their dance works more complete and full of tension. Through systematic training, this module helps students confidently show the charm of improvisational dance on stage and enhance their stage expression and artistic appeal. The following figure is a course theme display of stage performance of improvisational dance:

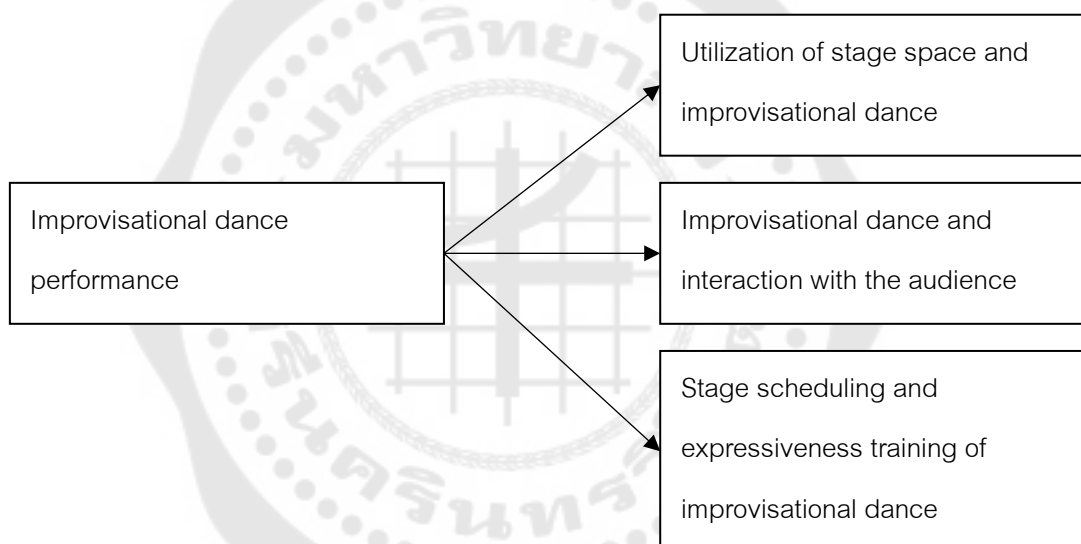


Figure 10 Course topic on stage performance of improvisational dance

The teamwork module of improvisational dance encourages students to use their personal creativity in the group and learn to collaborate with others through group improvisational dance creation; through improvisational dance practice in teamwork, it cultivates students' tacit understanding and collaboration ability and enhances the overall expressiveness of the team; finally, through the role allocation and interaction in improvisational dance, it helps students understand the importance of role

division and enhance the layering and richness of dance works through interaction. The following figure shows the course theme of teamwork in improvisational dance:

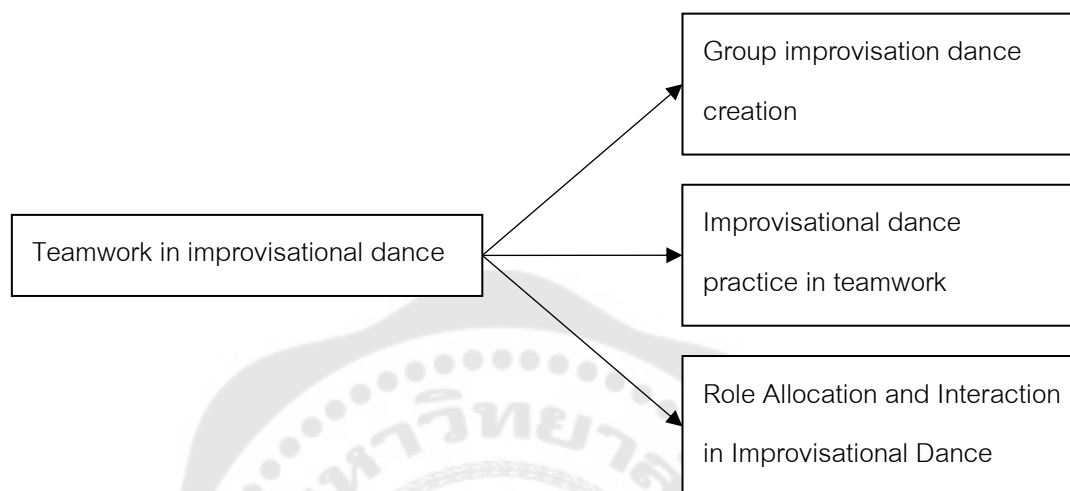


Figure 11 Course theme of teamwork in improvisational dance

The design and development of the improvisational dance course is student-centered, combined with the core concept of the Dalcroze teaching method, through the systematic teaching of eight major themes (basic theory of improvisational dance, body perception and development, music perception and rhythm training, basic skills of improvisational dance, improvisational dance creation methods, emotional expression of improvisational dance, stage performance of improvisational dance, and teamwork of improvisational dance), to help students gradually master the core skills of improvisational dance from theory to practice. The course design focuses on the combination of body and music, improvisation, emotional expression and teamwork, aiming to cultivate students' music perception, creativity, emotional expression and stage performance. Through diversified teaching methods and rich educational resources, the course not only improves students' dance skills, but also promotes their all-round development, laying a solid foundation for their future dance career and personal growth.

4.3.3 Teaching schedule

1) Teaching Week Schedule

The teaching time in the course design is the first semester of grade ten, a total of 16 weeks of courses, with 2 classes per week.

The arrangement is designed according to the dance course schedule in the dance science training program of the Art School of China Coal Mine Art Troupe.

Table 5 Dance training plan

Course Type	Module direction	Course Title	credit	Total study hours	Zhou Xueshi
Professional Courses	Base	Basic dance training	5	160	10
		Dance Soft Skills	2	64	4
		Dance Techniques	1	32	2
		Dance Body	1	32	2
	Dance	Folk Dance	2	64	4
		Modern Dance	2	64	4
		Rehearsal	1	32	2
total			14	448	28

2) Duration of each lesson

According to the arrangement of the Academic Affairs Office of the China Coal Mine Art Troupe Art School, each class lasts 45 minutes. Therefore, each class of the improvisation course also lasts 45 minutes.

Table 6 Schedule of the Art School of China Coal Mine Art Troupe

Time period	Lesson	time
morning	1	08:30-10:00
	2	
	3	10:15-11:45
	4	
noon	Lunch break	12:30-14:00
afternoon	5	14:15-15:45
	6	
	7	16:00-17:30
	8	
night	Night rest	17:30-18:00
	9	18:00-19:30
	10	

Source: China Coal Mine Art Troupe Art School Academic Affairs Office website, <http://www.ccmata.net/zgmkwgt/ysxx/201901/e437d5a91a4c4ae3b8f33f63c12a0c6e.shtml>

At the same time, according to the arrangement of the Academic Affairs Office of the China Coal Mine Art School, each class is 45 minutes, there are 2 improvisational dance classes per week, the comprehensive assessment is $45 \times 2 = 90$ minutes/week, the improvisational dance courses are a total of 16 weeks, and each class is 45 minutes according to the school's schedule.

4.3.4 Assessment methods and tools

1) Evaluation Method

The assessment is divided into daily performance, process assessment and final exam, making the assessment method more comprehensive and providing a more comprehensive assessment of students from the usual learning process to the final

learning outcomes. By observing the following content, teachers can teach better and students can learn better.

Table 7 Student Observation Form

Observation Project	Observation content	Scoring Criteria	Remark
Class participation	Whether students actively participate in class activities and take the initiative to answer questions or raise questions.	1-5 points (1 is not involved, 5 is very active)	
Music perception ability	Students' ability to perceive and respond to musical rhythm, melody and emotion.	1-5 points (1 is no response, 5 is quick and accurate response)	
Body coordination	Students' body coordination, flexibility and control in dance movements.	1-5 points (1 is not coordinated, 5 is very coordinated)	
Improvisational skills	Students' creativity in improvisational dance, whether they can improvise expressive movements based on music.	1-5 points (1 is no creativity, 5 is rich creativity and strong expression)	
Emotional Expression	Whether students can accurately express the emotions in the music through dance movements.	1-5 points (1 is no emotional expression, 5 is rich and accurate emotional expression)	
Teamwork	Students' ability to cooperate in group activities and whether they can collaborate with others to complete dance creations.	1-5 points (1 is uncooperative, 5 is cooperative and efficient)	

Table 7 (Continued)

Stage performance	The students' expressiveness on stage, whether they can confidently present dance pieces and interact with the audience.	1-5 points (1 is not expressive, 5 is expressive and confident)
Learning attitude	Whether students have a serious attitude towards learning and whether they complete their homework and class tasks on time.	1-5 points (1 is not serious, 5 is very serious)
Progress	The student's progress in the course, whether there has been improvement in musical perception, physical coordination, improvisation, etc.	1-5 points (1 means no improvement, 5 means significant improvement)
self assessment	Students' self-evaluation of their performance and progress in class.	1-5 points (1 is dissatisfied, 5 is very satisfied)

In the Dalcroze improvisational dance course design, the evaluation method of academic performance measures and evaluates students' performance based on certain standards. Usually, the evaluation forms include tests and examinations. Examinations are generally divided into annual examinations, semester examinations, tests and graduation examinations (Editorial Committee of the Encyclopedia of China, 1985). The form of the examination can be an oral test, a written test or an operational test. Especially in dance courses, operational tests (i.e. actual dance performance) are an important way to evaluate students' improvisational dance ability. Examinations are usually divided into three types: daily examinations, stage examinations and summative examinations. The evaluation level can be pass/fail, five-point system or 100-point system (Editorial Committee of the Great Dictionary, 2014). At present, most schools evaluate academic performance through examinations and tests.

Commonly used scoring methods include 0-1 scoring method and graded scoring method, or a combination of scoring and evaluation.

In the teaching evaluation of Dalcroze improvisational dance course, three main methods are used: daily performance, process evaluation and final examination.

Table 8 Scores of evaluation methods

Evaluation method	percentage
Daily performance	15%
Process Evaluation	25%
Final Exam	60%

Daily performance is to observe students' performance in class and evaluate their reaction speed to music, creativity of improvisational dance, teamwork ability, etc. Daily performance evaluation can help teachers understand students' learning attitude and mastery of improvisational dance skills.

Process evaluation focuses on students' performance in the process of learning improvisational dance, including their progress in music rhythm perception, body coordination, improvisation ability, emotional expression, etc. Process evaluation emphasizes students' participation and creativity in class, helping teachers to adjust teaching strategies in a timely manner.

The final exam is a summative assessment, which usually includes a practical test (improvisational dance performance) and a theoretical test (such as understanding of the Dalcroze teaching method, analysis of music rhythm, etc.). The practical test is the core assessment method of the improvisational dance course. Students need to improvise dance movements according to music within a specified time to demonstrate their comprehensive ability.

2) Assessment Tools

The rubric method is used in the evaluation tool design of Dalcroze's improvisational dance course. The rubric is a real evaluation tool, which is a set of standards for evaluating or scoring student works, achievements, growth records or performances. At the same time, it is also an effective teaching tool and an important bridge between teaching and evaluation. Through the rubric, teachers can clearly define the performance standards of students in improvisational dance, help students understand their strengths and weaknesses, and thus improve their improvisational dance abilities in a targeted manner.

In the Dalcroze improvisational dance course, the design of the evaluation scale revolves around the core abilities of improvisational dance, including the following aspects: movement design, movement performance, music perception and response, emotional expression, and collaborative innovation. These ability indicators divide students' improvisational dance performance into five levels: excellent, good, general, pass, and fail. Through these indicators, teachers can comprehensively evaluate students' comprehensive performance in improvisational dance.

Table 9 Improvisational dance ability index

aspect	excellent	good	generally	Pass	Fail
Motion Design	The movements are creative and can be designed to suit the rhythm and emotions of the music, with smooth and expressive movements.	The movement design is creative, and reasonable dance moves can be designed according to the rhythm of the music, and the movements are relatively smooth.	The action design is relatively simple, and basic actions can be designed according to the rhythm of the music, but it lacks creativity.	The action design is rather stiff. It can complete basic movements but lacks fluidity and expressiveness.	The movement design is simple, and it is impossible to design reasonable dance movements according to the rhythm of the music.
Action performance	The movements are expressive, able to accurately convey the emotions in the music, and the body language is rich and infectious.	The movements are expressive, able to convey the emotions in the music, and the body language is relatively rich.	The expressiveness of the movements is average, able to basically convey the emotions in the music, but the body language is relatively simple.	The expressiveness of the movements is weak; the movements can be completed but the emotions are not conveyed clearly enough.	The movements are poorly expressive, unable to convey the emotions in the music, and the body language is stiff.

Table 9 (Continued)

Music Perception and Response	They have a keen sense of musical rhythm, melody and emotion, and can respond quickly and incorporate dance movements.	They are more sensitive to the rhythm, melody and emotion of music, and can respond quickly and incorporate dance movements.	Has average perception of music rhythm, melody, and emotion, and can make basic responses and incorporate dance movements.	The perception of musical rhythm, melody and emotion is weak, the reaction is slow, and the coordination between movements and music is not smooth enough.	They have poor perception of music rhythm, melody and emotion and are unable to make reasonable dance moves based on the music.
	She is able to accurately and profoundly express the emotions in the music through dance movements, and her emotional expression is extremely contagious.	Able to express the emotions in music more accurately through dance movements, and the emotions are conveyed more naturally.	Able to basically express the emotions in the music through dance movements, but the emotions are not conveyed deeply enough.	Able to convey some emotions through dance movements, but the emotions are not clearly expressed.	Unable to convey the emotions in the music through dance movements; emotional expression seems stiff or unnatural.

Table 9 (Continued)

Collaborative Innovation	He shows strong innovation and collaboration in teamwork and is able to work with others to create excellent improvisation al dance works.	Show good innovation and collaboratio n in teamwork, and be able to work with others to complete impromptu dance works.	Show certain innovation and collaboration in teamwork and be able to complete basic improvisation al dance creations.	He performs averagely in teamwork and is able to participate in improvisation al dance creation, but his innovation ability and spirit of collaboration are weak.	Poor teamwork and inability to collaborate with others to complete improvisational dance creations.

In the Dalcroze improvisational dance course, the evaluation scale is designed to comprehensively reflect the students' comprehensive abilities in improvisational dance. Movement design and movement performance evaluate students' creativity and physical expression; music perception and response evaluate students' sensitivity to music rhythm, melody and emotion; emotional expression evaluates students' ability to convey emotions through dance movements; and collaborative innovation evaluates students' collaboration and innovation in a team. Through these indicators, teachers can fully understand students' performance in improvisational dance and help them improve their dance skills and artistic expression.

Through a combination of daily performance, process evaluation and final examination, teachers can comprehensively evaluate students' improvisational dance ability. As an important evaluation tool, the evaluation scale not only helps

teachers to score objectively, but also provides students with clear learning goals and improvement directions. Through this evaluation method, students can continuously improve their music perception, body coordination, emotional expression and teamwork ability in the process of learning improvisational dance, and ultimately achieve comprehensive artistic development.

4.4 Experts' evaluation process of tool quality

4.4.1 IOC Expert Review Form

The International Olympic Committee Expert Evaluation Form is a tool used to evaluate the quality of course design, teaching plans or projects, usually conducted by experts in the field. In the Dalcroze improvisational dance course design, the IOC Expert Evaluation Form can be used to evaluate the scientificity, innovation, operability and teaching effectiveness of the course.

Table 10 IOC expert evaluation statistics

NO.	project	content	Expert 1	Expert 2	Expert 3	IOC Value	Remark
1	Music Perception	Train students to perceive musical rhythm, melody, pitch and other elements, and improve their ability to understand music.	1	1	1	1	
2	Body coordination	Through body rhythm exercises, students' body control and coordination abilities are improved, and their dance expressiveness is enhanced.	1	1	1	1	

Table 10 (Continued)

3	Improvisational dance skills	Students are encouraged to freely create movements according to the music to improve their expression and creativity.	1	0	1	0.67
4	Rhythm Mastery	Train students to accurately grasp the dance rhythm and improve their sense of rhythm.	1	1	1	1
5	creativity	The course design encourages students to improvise and enhance their artistic innovation capabilities.	1	1	1	1
6	Dalcroze's educational philosophy	The course is based on Dalcroze's "body rhythm" theory and combines auditory, visual and kinesthetic teaching.	1	1	0	0.67
7	Combining international and local	The course combines international modern dance teaching methods and adapts to the dance learning characteristics of Chinese students.	1	1	1	1
8	21st Century Education Concept (Creativity)	The course emphasizes the development of students' creativity through improvisation.	1	1	1	1

Table 10 (Continued)

9	21st Century Education Concept (Critical Thinking)	The course encourages students to analyze their own dance performances, come up with plans for improvement, and develop critical thinking.	1	1	1	1
10	21st Century Education Concept (Cooperation Ability)	The course includes group dance training to cultivate teamwork skills.	1	1	1	1
11	Course Organization	The course follows a step-by-step approach to ensure students master skills step by step.	1	1	1	1
12	Teaching activity design	Weekly lessons build upon each other to ensure students' skills continue to improve.	1	1	1	1
13	Teaching Methods	The course adopts a variety of teaching methods, such as oral explanation, video observation, and scenario simulation.	1	1	0	0.67

Table 10 (Continued)

14	Teaching feedback	Teachers ensure that learning objectives are achieved through classroom feedback and student self-assessment.	1	1	1	1
15	Dalcroze's basic theory	Students learn and apply Dalcroze's core theories in practice.	0	1	1	0.67
16	Music and dance combination	Improve students' music perception ability through music analysis and body rhythm training.	1	1	1	1
17	Dance Techniques	The course includes basic dance skills training to improve students' expressiveness and technical quality.	1	0	1	0.67
18	Improvisational dance creation	The course encourages students to improvise in different situations and improve their artistic expression skills.	1	1	1	1
19	Scientific	The course is based on dance and music theory to ensure the scientific nature of the teaching content.	1	1	1	1

Table 10 (Continued)

The course						
20	Completeness	The course comprehensively covers all aspects of modern dance, from basics to creation.	1	1	1	1
21	Practicality	The course provides practical dance training and a creative platform to prepare students for their future career development.	1	1	0	0.67
22	Innovation	Students are encouraged to use innovative thinking and improve their personal style during dance improvisation.	1	1	1	1
23	Student Self-Development	The course helps students improve their music perception, dance skills, creativity and other abilities, and promotes their all-round development.	1	1	1	1

4.4.2 IOC Expert Recommendations

1. Improvisational dance ability (Expert 2 gives 0 points)

The problem with improvisational dance ability is that the course does not provide enough practice on improvisational dance, and the teaching method of improvisational dance is not clear and systematic enough.

After the improvements made through the suggestions, this paper adds an improvisational dance training module, such as asking students to improvise dance expressions in different music styles, rhythms or situations. Introducing phased exercises (from simple body movements to more complex emotional expressions) to ensure that students can gradually master improvisational dance skills. Strengthening the feedback mechanism, allowing teachers to provide personalized guidance on students' improvisational performance and allowing students to self-evaluate.

First, we will add an improvisational dance training module. We will set up a special improvisational dance training unit in the course, such as "Improvisational Expression and Dance Creation", to allow students to practice improvisational dance in different music styles, rhythms or situations.

Then introduce phased practice

Phase 1: Body liberation training (free movement, imitation exercises);

Phase 2: Emotion-driven training (improvisation combined with musical emotions);

Phase 3: Dance structure training (enabling students to create repeatable movement combinations in improvisation);

Final stage: stage improvisation training (improvisation in a mock performance).

At the same time, the feedback mechanism should be strengthened so that teachers can provide personalized feedback after classroom improvisation performances and encourage students to evaluate each other and themselves to help them understand the key points of improvisation.

2. Dalcroze's educational philosophy (Expert 3 gave 0 points)

The problem with Dalcroze's educational philosophy is that the course does not apply the Dalcroze teaching method in depth enough, and students fail to clearly understand the role of this philosophy in dance teaching.

After the improvement through the suggestions, this article strengthens the theoretical explanation, adds the theoretical introduction of Dalcroze teaching method in the course, and combines it with case analysis to make students understand the core concepts of the method. Increase practical application and design more exercises based on Dalcroze method, such as rhythm walk, improvisation of body rhythm, etc. Incorporate music training and combine music auditory training (such as letting students express different rhythm changes through body movements) to strengthen Dalcroze's core concept.

First, the course adds a unit called "Introduction to Dalcroze Teaching Method" to introduce its core concepts in detail, such as sense of rhythm, body perception, and improvisation. Then, combined with case teaching, analyze the specific application of Dalcroze teaching method in modern dance and music education. Introduce rhythmic walking training in teaching, so that students can perceive different rhythm changes with their steps. Design improvisational body rhythm training, so that students can express melody, rhythm and dynamic changes through their bodies. Combine sound-body synchronization training (such as using the body to express melody lines) to help students better understand the relationship between music and dance. Finally, let students integrate into music training and let them "listen" to music with their bodies (such as changing the center of gravity with the beat and expressing the melody with gestures). Combined with body percussion, let students tap the rhythm with their bodies before dancing to enhance their rhythm perception ability.

3. Teaching methods (Expert 3 gave 0 points)

The problem with teaching methods is that they are too single and fail to make full use of diversified teaching methods to enhance students' learning experience.

After improvements are made through suggestions, this article enriches teaching strategies. In addition to oral explanations and video observations, task-driven learning (letting students explore and solve problems on their own) and practical

workshops (letting students experience different styles of dance in person) can be added. Multi-sensory teaching can be carried out, combining vision (dance demonstration), hearing (music rhythm), touch (body movement) and other methods to make the course more immersive. Targeted personalized teaching is carried out, the teaching rhythm is adjusted according to the different levels of students, and tiered guidance is provided so that students of different levels can obtain a learning path that suits them.

In order to enrich the teaching strategies, in addition to oral explanations and video observations, we added problem-based learning to allow students to explore dance creation with questions. We added workshops to invite professional dancers to share improvisation techniques so that students can learn through actual interactions. We combined vision (dance demonstration), hearing (music rhythm), and touch (body rhythm exercises) to allow students to understand the rhythm and expression of dance in a variety of ways. We designed situational learning, such as asking students to imitate physical performance in different situations (wind, rain, animals, machinery, etc.).

For personalized teaching, basic, intermediate and advanced exercises can be provided according to the students' level to ensure that all students can get a training plan that suits them. Set up self-selected challenge tasks in class to allow students to choose exercises of different difficulty levels according to their personal abilities.

4. Dalcroze's basic theory (expert 1 gave 0 points)

The problem with Dalcroze's basic theory is that the course does not provide enough introduction to Dalcroze's basic theory, and students are unable to fully understand and apply it.

After the improvement suggested in this paper, a theoretical course is added, and a special chapter "Dalcroze Theory" is set up in the syllabus to introduce its development background, core concepts and teaching practices in detail. Combined

with case teaching, demonstration videos or dance performances are used to show how the Dalcroze teaching method is applied in modern dance and music education. Practical operation training designs specific exercises, such as rhythm training (students use their bodies to express different beats) and music-body connection training (expressing melody and rhythm changes through movements).

5. Dance skills (Expert 2 gives 0 points)

The problem with dance skills is that the dance skills training in the course is not systematic enough or fails to effectively improve students' technical level.

After making improvements through suggestions, this article advocates systematic training to ensure that dance technique practice is progressive, from basic techniques (such as center of gravity control, footwork practice) to complex movements (such as rotation, jump, rhythm change). Combine rhythm training and combine Dalcroze teaching method with skill training, for example: let students complete dance movements at different rhythms to improve body control ability. Understand students' personalized feedback in a timely manner, give students specific feedback during dance technique training, and set improvement goals.

First, we conduct systematic training, and the course design adopts progressive dance skills training:

Primary: step control, basic rhythm steps, body weight transfer;

Intermediate: rotation, jumping, body control training;

Advanced: difficult techniques (such as handstands and somersaults), and adaptability to rhythm changes.

Have students perform dance moves at different rhythms (e.g. fast-paced steps vs. slow-paced smooth movements). Use rhythm change exercises (e.g., adapting a dance step to different music rhythms). Use video playback analysis (Video Feedback) to allow students to observe and adjust their dance skills. After each class, teachers provide personalized improvement plans to help students improve their skills.

6. Practicality (Expert 3 gave 0 points)

The problem with practicality is that the course is not closely integrated with students' future career development or real dance creation needs.

After the improvements made through the suggestions, this article strengthens the career orientation, adds actual dance creation projects to the curriculum, gives students the opportunity to choreograph complete works and simulate stage performances. Introduces industry mentors, invites dance choreographers and professional dancers to conduct workshops, shares industry experience, and exposes students to the actual creative environment. Provides practical opportunities, so that students have the opportunity to show their works in public performances, dance competitions or art festivals to improve their practical experience. Establishes cooperative relationships with dance institutions and theater companies to provide internship opportunities for students.

4.5 Develop improvisational lessons based on themes

week (one semester) course is designed for the Dalcroze Improvisational Dance Course. The course is designed around the core skills of improvisational dance, combining themes such as music perception, body coordination, emotional expression and teamwork to gradually improve students' improvisational dance skills.

Table 11 Instructors

Course Title	Instructor
Improvisation Courses	Guo Jiahao

Table 12 Course items

project	content
semester	One semester (16 weeks per semester)

Table 12 (Continued)

Weekly Classes	2 lessons (45 minutes each)
Course Objectives	Through the Dalcroze teaching method, students' musical perception, physical coordination, improvisation, emotional expression and teamwork abilities are developed.
Teaching Methods	Oral and practical teaching method, video observation method, heuristic teaching method, scenario simulation method, association method, task-driven learning, practical workshop, etc.
Evaluation method	Daily performance (15%), process evaluation (25%), final exam (60%)

Table 13 Course Design

Week	theme	Course Objectives	Teaching Methods	Teaching Activities	Evaluate	Teaching resources and equipment	Design principles
week 1	Basic preparation stage	Introduce the Dalcroze teaching method and its core element "body rhythm" to establish the basic connection between music and dance.	Oral teaching, video observation	Watch improvisation al dance videos and practice simple body movements (such as nodding and swaying).	Observe students' engagement and physical responsiveness.	Video and music player	Student-centered, focusing on the cultivation of basic perceptual abilities.

Table 13 (Continued)

week 2	Music perception training	Enhance students' perception of musical rhythm and melody, and learn basic knowledge such as whole notes, half notes, and quarter notes.	Heuristic teaching method, scenario simulation method	Listen to music and identify note values, adjust the duration of dance movements, and use body movements to express the rhythm of the music (such as clapping and stepping).	Assess students' ability to perceive and respond to musical rhythms through classroom exercises.	Music players, rhythm instruments	Combining theory with practice, focusing on the coordination between music and body.
		Learn more complex body movements (such as spinning, jumping) to improve body rhythm and make movements more fluid and natural.	Oral and associative teaching method	Combine music with continuous body movement exercises to perform training movements such as rotation and jumping.	Observe students' body coordination and fluidity of movement.	Music player, mirror	Focus on the deep integration of body and music to enhance the fluency and expressiveness of movements.

Table 13 (Continued)

week 4	Basic improvisation dance training	Master the basic techniques of improvisation	Heuristic teaching method, scenario simulation method	Practice improvisation	al dance with music changes and learn how to express emotions with body language.	Assess students' ability to improvise and express emotions.	Music player, mirror	Emphasize the cultivation of improvisational response and emotional expression, and pay attention to students' creativity.
		learn how to respond quickly to changes in music, and use body language to express emotions.						
week 5	Improvisational dance practice	Encourage students to create boldly, enhance their creativity, and work in groups to jointly create dance works.	Association method, image observation method	Set a theme or situation, guide students to improvise dance, and work in groups to create dance works.		Assess students' creative performance and teamwork skills.	Music players, video recording equipment	Focus on teamwork and creative expression, and encourage students to create boldly.

Table 13 (Continued)

week 6	Performance	Perfecting dance pieces, adjusting movements and details, preparing for the final performance.	Oral Teaching	Students rehearse in groups, and teachers guide them to adjust movements and details to ensure the integrity of the dance work.	Evaluate students' stage performance and the completion of their works.	Music player, stage equipment	Focus on stage performance and the integrity of the work to enhance students' self-confidence.
	Preparation						
week 7	Stage Rehearsal	Conduct stage rehearsals to familiarize yourself with the stage environment and improve your expressiveness.	Scenario simulation	Students rehearse on stage, simulate formal performance s, and become familiar with the stage environment.	Assess students' stage adaptability and performance.	Stage equipment, music player	Focus on stage performance and students' adaptability to enhance the artistic appeal of dance works.

Table 13 (Continued)

week 8	Results display and evaluation	Students perform impromptu dance performances to showcase their learning achievements, and teachers and classmates evaluate them and make suggestions for improvement.	Students perform impromptu dance performance s, and teachers and classmates evaluate their performance s and make suggestions for improvement.	Students perform impromptu dance performance s, and teachers and classmates evaluate their performance s and make suggestions for improvement.	Comprehensively evaluate students' dance improvisation ability, emotional expression and stage performance.	Stage equipment, music players, video equipment	Focus on comprehensive assessment to help students summarize their learning outcomes and improve their shortcomings.
week 9	Body perception and development	Awaken the perception of various parts of the body and improve body flexibility and coordination.	Heuristic teaching method, scenario simulation method	Perform awareness and awakening exercises for various parts of the body, such as body stretching and flexibility training.	Assess students' body awareness and flexibility.	Music player, yoga mat	Focus on the cultivation of body perception ability and enhance students' body control.

Table 13 (Continued)

week 10	Music perception and rhythm training	Strengthen students' ability to perceive musical rhythm and learn how to express the rhythm of music with their bodies.	Heuristic teaching method, scenario simulation method	Rhythm training is carried out by combining music rhythm with body movements (such as clapping and stepping).	Assess students' ability to perceive and respond to musical rhythms.	Music players, rhythm instruments	Focus on the combination of music and body to enhance students' sense of rhythm and music perception.
		Master the basic movement elements of improvisation	Oral and spoken teaching method	Practice basic improvisation al dance movements such as walking, running, jumping, and spinning.	Assess students' dance technique and movement expression.	Music player, mirror	Focus on the training of basic dance skills to enhance students' expressiveness of movements.
week 11	Basic techniques of improvisational dance	al dance (such as walking, running, jumping, and spinning) to improve dance skills.					

Table 13 (Continued)

week 12	Improvisational dance creation method	Learn the creative motivation and theme selection of improvisational dance, and master the practice of movement changes and development.	Heuristic teaching method, scenario simulation method	Through the practice of movement variation and development, learn how to choose a theme and improvise.	Assess students' creative expression and ability to vary movements.	Music players, video recording equipment	Focus on the cultivation of creative expression and movement changes to enhance students' improvisation ability.
		Learn how to express different emotions (such as joy, anger, sadness) through dance movements.	Association method, scenario simulation method	Through the combination of emotion and movement, learn how to express emotions through dance movements.	Assess students' ability to express emotions and movements.	Music player, mirror	Focus on the cultivation of emotional expression and enhance students' dance expressiveness and artistic appeal.

Table 13 (Continued)

week 14	Improvisatio nal dance performance	Practice				Focus on	
		Learn how to use stage space for improvisation al dance and improve your stage performance.	Scenario simulation and heuristic teaching method	improvisation al dance on stage, learn how to interact with the audience and improve your stage presence.	Students are assessed on their stage presence and ability to interact with the audience.	Stage equipment, music player	stage performance and interaction with the audience to enhance students' stage confidence.
week 15	Teamwork in improvisatio nal dance	Practice				Focus on	
		Cultivate students' teamwork ability through group improvisation dance creation.	Association method, scenario simulation method	Work in groups to improvise dances and learn how to assign roles and interact within a team.	Assess students' teamwork skills and awareness of role allocation.	Music players, video recording equipment	the cultivation of teamwork and role allocation to enhance students' collaborative ability.

Table 13 (Continued)

		Students					
		perform		Students		Focus on	
		impromptu		perform		comprehens	
		dance		impromptu	Comprehensi	ive	
		performances		dance	vely evaluate	assessment	
		to showcase	Performanc	performance	students'	Stage	to help
	Final results	their learning	e evaluation	s, and	dance	equipment,	students
week	presentation	achievements	methods,	teachers and	improvisation	music	summarize
16	and	, and teachers	self-	classmates	ability,	players,	their
	evaluation	and	evaluation	evaluate their	emotional	video	learning
		classmates	methods	performance	expression	equipment	outcomes
		evaluate them		s and make	and stage		and improve
		and make		suggestions	performance.		their
		suggestions		for			shortcoming
		for		improvement.			s.
		improvement.					

In summary, through the development and design of the Dalcroze improvisation dance course, the 21st century educational concept, the construction principles and implementation steps of the Dalcroze improvisation concept were applied. The course design was evaluated by IOC experts, and the course design was modified based on the collected opinions to form the above specific course design table. The course design table includes students' learning outcomes and learning abilities, and designs the content, learning objectives, teaching activities, evaluation methods, teaching resources and equipment of 16 improvisation dance courses this semester. It can provide teaching staff with teaching design samples and guide their teaching activities.

The course design was improved based on the opinions of IOC experts, especially in the personalized learning part, with the addition of online and offline teaching resources, the adjustment of the combination of various teaching methods (such as heuristic teaching method, scenario simulation method, association method, etc.), and the use of a variety of evaluation methods (such as daily performance, process evaluation, final exam, etc.), enriching the teaching content. In addition, the course also incorporates the core concept of the Dalcroze teaching method, emphasizing the combination of music and body, helping students express emotions and enhance creativity through improvisational dance.

In the course design, special attention is paid to the core abilities of improvisational dance, including music perception, body coordination, emotional expression and teamwork. Through systematic training, students can gradually master the skills of improvisational dance, improve their sensitivity to music rhythm, enhance their body control and expression, and learn to convey emotions through dance movements. The course also cultivates students' teamwork ability and stage expression through group cooperation and stage performance. There are still many shortcomings in the entire course design, and we will continue to discuss with experts and make adjustments based on the actual situation of students so that the course design can better adapt to the development needs of students and help them find their personal style in improvisational dance.

4.6 Focus Group Expert Evaluation of Improvisational Course Design

In order to prove the effectiveness and practicality of Dalcroze's improvisational dance course design, focus groups were used for discussion and analysis, and five experts were invited to conduct focus group discussions.

In terms of the expert selection criteria, experts with a certain professional background in improvisational dance teaching were invited. These experts have

practical experience in dance teaching in professional art colleges, and some have experience in teaching improvisational dance in primary and secondary schools, and have a dance education background. These experts have objective and effective professional support for students' learning and development in school and the future application of improvisational dance teaching knowledge. Therefore, in the selection of experts, the focus group consisted of five experts from the front line of dance teaching in colleges and universities.

The topic of discussion is: Design of improvisational dance courses under Dalcroze's improvisation concept.

The Dalcroze improvisational dance course design is designed for students majoring in dance in art schools. The course design mainly provides a specific teaching plan for the improvisational dance course. The discussion includes course content, time arrangement, teaching activities, evaluation, and whether students can master improvisational dance skills through the course design and promote improvisational dance teaching ability.

4.6.1 Distribution of teaching content

4.6.1.1 Opinions of five experts

1) Theoretical foundation module (accounting for 20% of the total class hours)

Table 14 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

2) Perception training module (30% of the total class time)

Table 15 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

3) Improvisation module (35% of total class time)

Table 16 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

4) Stage practice module (accounting for 10% of the total class hours)

Table 17 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

5) Teaching ability module (accounting for 5% of the total class hours)

Table 18 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

As can be seen from the above table, the five experts agreed on the distribution of teaching content in five parts: theoretical foundation module (accounting for 20% of the total class hours), perception training module (accounting for 30% of the total class hours), improvisation module (accounting for 35% of the total class hours), stage practice module (accounting for 10% of the total class hours), and teaching ability module (accounting for 5% of the total class hours).

4.6.1.2 Summary of expert opinions

Table 19 Focus Group Evaluation Form

content	agree	disagree
Theoretical foundation module (accounting for 20% of the total class time)	✓	
Perception training module (30% of total class time)	✓	
Improvisation module (35% of total class time)	✓	
Stage practice module (accounting for 10% of the total class time)	✓	
Teaching ability module (accounting for 5% of total class hours)	✓	

Experts highly praised the course design, believing that it innovatively achieved the organic unity of professionalism and teacher training. University experts particularly pointed out that the course broke through the limitations of traditional professional colleges that emphasized technology over education. The proportion of 30% perceptual training and 35% creative modules was scientific and reasonable, which not only grasped the essential characteristics of "music-body linkage" of improvisational dance, but also ensured the cultivation of students' practical ability; the setting of the teaching ability module further highlighted the characteristics of teacher education. Basic education experts emphasized that the course creatively combined the Dalcroze system with the requirements of the new curriculum standards, and the theoretical foundation module should supplement the history of the development of Dalcroze's theory. All modules were permeated with the awareness of educational transformation, especially the design of the teaching ability module was forward-looking, and it was suggested that the improvisation training content of special education scenarios could be further integrated. The perceptual training module needs to build a national music material library.

Experts agree that the course design, through modular architecture and scientific class time allocation, not only maintains the professional depth of the Dalcroze system, but also expands the breadth of application of teacher education. The innovative five-stage training path of "theoretical foundation → perception training → improvisation → stage practice → teaching ability", combined with the implementation of dual-teacher teaching and smart laboratories, has formed a complete training system for improvisation dance teachers, which can effectively cultivate new dance education talents who "understand music, improvise, and can teach", and is of great value in promoting the reform of basic art education.

4.6.2 Arrangement of teaching time

4.6.2.1 Opinions of five experts

1) Starting semester: The first semester of grade 10

Table 20 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

2) Teaching period: 16 weeks of courses, 2 classes per week

Table 21 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

3) Teaching time: 45 minutes per class

Table 22 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

4.6.2.2 Summary of expert opinions

Table 23 Focus Group Evaluation Form

content	agree	disagree
Starting semester: The first semester of grade 10	✓	
Teaching period: 16 weeks, 2 classes per week	✓	
Teaching time: 45 minutes per class	✓	

In the focus group discussion, the five experts highly recognized the teaching schedule of the Dalcroze improvisational dance course design. The experts agreed that it was reasonable to arrange the course in the first semester of the tenth grade, which was in line with the students' physical and mental development stage; the 16-week teaching cycle (2 classes per week) could fully cover the core content of improvisational dance while avoiding students from getting tired due to the long course; and the 45-minute duration of each class could not only ensure the integrity of the teaching content, but also maintain students' concentration, which was very suitable for the practical needs of the dance course. Overall, the experts believed that this time arrangement was scientific and reasonable, highly operational, and could effectively support students' learning goals and ability development.

4.6.3 Improvisational Course Process

4.6.3.1 Opinions of five experts

1) Course introduction

Table 24 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

2) Course content teaching

Table 25 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

3) Classroom Exercises

Table 26 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

4) Class quizzes

Table 27 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

5) After-class exercises

Table 28 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

4.6.3.2 Summary of expert opinions

Table 29 Focus Group Evaluation Form

content	agree	disagree
Course Introduction	✓	
Course content teaching	✓	
Classroom Exercises	✓	
Class Quiz	✓	
After-class exercises	✓	

In the focus group discussion, five experts conducted a comprehensive evaluation of the teaching process design of Dalcroze's improvisational dance course. The experts unanimously agreed on the five core links of the course design: course introduction, course content teaching, class exercises, class quizzes and after-class exercises. They believe that these links can effectively guide students to develop cognitive abilities and creative thinking in improvisational dance.

However, experts A and D emphasized the importance of the course introduction, pointing out that this is a key stage to stimulate students' interest in improvisational dance and establish a music-body connection. It is recommended to add more improvisational elements to the introduction, such as starting each class with improvisational response exercises for music clips. Experts B and E suggested that the homework review time should be appropriately extended, and proposed that homework feedback should focus more on the process rather than the results in view of the characteristics of improvisational dance. Teachers need to provide personalized guidance in terms of improvisational expression and music perception according to individual differences of students. They can increase improvisational creation logs to record reflections and inspirations after each class. Expert C particularly emphasized the value of interactive discussion, incorporating more group improvisational presentations and mutual evaluations into homework review, encouraging students to make creative comments on each other's improvisational performances, and cultivating students' artistic expression ability and innovative thinking through discussion.

4.6.4 Use of teaching methods

4.6.4.1 Opinions of five experts

1) Oral and hands-on teaching

Table 30 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

2) Video observation method

Table 31 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

3) Heuristic teaching method

Table 32 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

4) Scenario simulation method

Table 33 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	

Table 33 (Continued)

Expert D	✓
Expert E	✓

5) Association method

Table 34 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

As can be seen from the above table, in the use of relevant teaching methods, the five experts all agreed with the teaching methods of oral teaching, video observation, heuristic teaching, situational simulation, and association.

4.6.4.2 Summary of expert opinions

Table 35 Focus Group Evaluation Form

content	agree	disagree
Oral and hands-on teaching	✓	
Video observation method	✓	
Heuristic teaching method	✓	
Scenario Simulation	✓	
Association method	✓	

Regarding the use of teaching methods, the five experts spoke highly of Dalcroze's improvisational dance teaching method and put forward innovative suggestions. Experts B and E pointed out that the heuristic teaching method is highly praised for its ability to cultivate independent thinking, and particularly emphasizes the need to reserve sufficient time for thinking; Expert A pointed out that the situational simulation method is effective in stimulating emotional expression, and experts suggest creating abstract situations by combining multi-sensory elements ; Experts C and D pointed out that the association rule has been proven to be effective in developing creative thinking, but attention should be paid to the age adaptability of image selection. Experts unanimously recommended the adoption of the "3+2" dynamic combination model, integrating traditional methods with digital technology and establishing a culturally adapted teaching material library. They also emphasized the need to regularly rotate method combinations to maintain the novelty of teaching. These evaluations provide a methodological system for improvisational dance teaching that maintains professional depth while stimulating creativity.

4.6.5 Student performance evaluation methods

4.6.5.1 Opinions of five experts

- 1) Daily performance + process evaluation + final exam

Table 36 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

2) Student Observation Form

Table 37 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

3) Scores of the evaluation method

Table 38 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

4.6.5.2 Summary of expert opinions

Table 39 Focus Group Evaluation Form

content	agree	disagree
Daily performance + process evaluation + final exam	✓	
Student Observation Form	✓	
Evaluation method scores	✓	

Regarding the evaluation method, based on the opinions of five experts, the student observation form was used in combination with process evaluation and final exam results to evaluate students. The five experts said that the design of the student observation form can allow students to more intuitively see the gap in improvisational dance ability, and can comprehensively evaluate students' learning effects through regular classroom evaluation methods, homework, and works, and can achieve the goal of ability training.

4.6.6 Improvisational dance ability index

4.6.6.1 Opinions of five experts

1) Motion Design

Table 40 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

2) Action performance

Table 41 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	

Table 41 (Continued)

Expert D	✓
Expert E	✓

3) Music Perception and Response

Table 42 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

4) Emotional expression

Table 43 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

5) Collaborative innovation

Table 44 Focus Group Evaluation Form

Expert group	agree	disagree
Expert A	✓	
Expert B	✓	
Expert C	✓	
Expert D	✓	
Expert E	✓	

4.6.6.2 Summary of expert opinions

Table 45 Focus Group Evaluation Form

content	agree	disagree
Motion Design	✓	
Action performance	✓	
Music Perception and Response	✓	
Emotional Expression	✓	
Collaborative Innovation	✓	

The ability assessment system design of the Dalcroze improvisational dance course mainly includes five core indicators: movement design, movement performance, music perception and response, emotional expression, and cooperative innovation. The five expert reviewers believe that the course design fully reflects the core concepts of "body rhythm" and "music visualization" in the Dalcroze teaching method, and can effectively cultivate students' needs in improvisational dance:

- 1) Creative movement design ability;
- 2) Body expression;
- 3) Music-movement transformation ability;
- 4) Emotional externalization ability;
- 5) Improvisational collaboration ability.

Through this course system, students can not only master the professional skills

of Dalcroze improvisational dance, but also cultivate the improvisational teaching guidance ability and artistic innovation ability required for future dance education.

4.6.7 Summary of Focus Group Experts' Revision Comments

Experts put forward suggestions for module adjustments in order to optimize the course content. The theoretical foundation module should be supplemented with the history of Dalcroze's theoretical development, the perceptual training module needs to build a library of ethnic music materials, the improvisation module needs to include cases from multicultural backgrounds, and the teaching ability module should incorporate special education scenario training content.

Experts also put forward suggestions for improvement in teaching implementation, suggesting extending the feedback time for homework, reserving more thinking time in the 45-minute class, adding "3-minute music improvisation response" exercises, developing an "improvisation digital log system" in classroom exercises and increasing group mutual evaluation sessions.

The teaching method innovation suggestion is to adopt the "3+2 dynamic combination" model, combining the basic combination with the extended combination. The basic combination is oral teaching + scenario simulation + association method, while the extended combination is video analysis + gamification learning . And the method combination should be rotated regularly to maintain novelty. Specifically, in the scenario simulation method, abstract situations are created by combining multi-sensory elements; in the association method, an age-appropriate image selection guide is established, and a culturally appropriate teaching material library is developed; in the heuristic teaching method, sufficient independent thinking time is reserved and open-ended questions are set.

Through the expert discussion of the above focus group, it can be seen that the improvisational dance course design in this paper has been unanimously recognized by experts in terms of teaching time, teaching content, teaching process,

teaching methods, evaluation methods, and improvisation ability training. Experts provided effective suggestions on some details, especially in the optimization of teaching content. In the design of teaching methods, the five experts put forward higher and deeper requirements for the specific presentation of teaching methods, which can make the improvisational dance course design more perfect. The following are the modifications made to the course design based on the suggestions of the five experts.

4.6.8 Revised and improved course design based on focus group recommendations

Through expert discussion in the focus group, the course design was modified based on the suggestions of five experts.

The Dalcroze improvisational dance course is designed for a 16-week (one semester) course schedule. The course design revolves around the core competencies of improvisational dance, combining themes such as music perception, body coordination, emotional expression and teamwork to gradually improve students' improvisational dance abilities. Based on the experts' suggestions, the course content, teaching methods and assessment methods have been adjusted as follows:

Table 46 Instructors

Course Title	Instructor
Improvisation Courses	Guo Jiahao

Table 47 Revised course items

project	Revisions
semester	1 semester (16 weeks per semester)
Weekly Classes	2 lessons (45 minutes each)
Course Objectives	Through the Dalcroze teaching method, students' musical perception, physical coordination, improvisation, emotional expression and teamwork abilities are developed.

Table 47 (Continued)

Teaching Methods	Oral and practical teaching, video observation method, heuristic teaching method, scenario simulation method, association method, task-driven learning, practical workshop, digital technology-assisted teaching, etc.
Evaluation method	Daily performance (15%), process evaluation (25%), final exam (60%)

Table 48 Revised course design

Week	theme	Course Objectives	Teaching Methods	Teaching Activities	Evaluation method	Teaching resources and equipment	Design principles
week 1	Basic preparation stage	the development history of Dalcroze teaching method and its core element "body rhythm", and establish the basic connection between music and dance.	Oral teaching, video analysis, and body movements gamification learning	Watch improvisational dance videos, play simple rhythm imitation games, practice (such as nodding and swaying), and use digital tools to analyze rhythm.	Observe students' engagement and physical responsiveness.	Video, music player, rhythm analysis software	Focus on students and emphasize the combination of theory and practice Strengthen the sense of history and body rhythm

Table 47 (Continued)

week 5	Improvisation al dance practice	Encourage students to create boldly, enhance their creativity, and work in groups to jointly create dance works and multicultural themes	Association method, image observation method, task-driven learning	Set a multicultural theme or situation, set creative tasks in a gamified way, and complete a puzzle-like improvisational dance. Guide students to improvise dance and work in groups to create dance works.	Assess students' creative performance and teamwork skills.	Music player, video recording equipment, creative journal, multicultural case video library	Focus on enhancing the interest of learning, teamwork and creative expression encourage students to create boldly and promote the concept of cultural symbiosis
		Perfect the dance work, adjust the movement details, improve the movement design and stage transition to prepare for the final performance.	Oral teaching, multi-sensory scenario simulation method	Students rehearse in groups, and teachers guide them to adjust movements and details, simulate different stage scenarios (such as open stage, small theater); set open questions to promote reflection. Ensure the integrity of the dance work.	Evaluate students' stage performance, work completion, stage coordination and situational coping ability.	Music players, stage equipment, video equipment	Focus on stage performance and the integrity of the work, and emphasize the integration of situational thinking and technology. Improve students' self-confidence.
week 6	Performance Preparation						

Table 47 (Continued)

week 9	Body perception and development	Awaken the perception of various parts of the body and improve body flexibility and coordination.	Heuristic teaching method, scenario simulation method	Perform perception and awakening exercises for various parts of the body (such as meditation, relaxation, stretching, body perception exercises, flexibility training, etc.), and mobilize various parts of the body with music.				Assess students' body perception and body control abilities, flexibility.	Music player, yoga mat, mirror	Improve students' body control and flexibility, and focus on the cultivation of sensory awareness.
week 10	Music perception and rhythm training	Strengthen students' ability to perceive musical rhythm and learn how to express the rhythm of music with their bodies.	Heuristic teaching method, scenario simulation method, 3+2 dynamic combination	Listen to music rhythms from different cultures and participate in rhythm reaction games. Perform rhythm training by combining music rhythms with body movements (such as clapping and stepping).				Students' perception and response to music rhythm exercises and game points evaluation performance	Folk music library, music player, rhythm instruments	Emphasis on musical cultural diversity with music-movement, it can enhance students' sense of rhythm and music perception.

Table 47 (Continued)

11	week	Basic improvisational dance techniques (such as improvisation and al dance)	Master the basic movement elements of improvisational techniques of dance (such as walking, running, jumping, and spinning) to improve dance skills.	3+2 dynamic combination teaching method (strengthening oral teaching and physical demonstration), associative teaching method	Follow the teacher to practice basic movements, imitate and reorganize the improvisational movements of dancers of different styles, and practice the basic movements of improvisational dance, such as walking, running, jumping, spinning, etc.	Observe students' imitation and execution of movements and evaluate their dance skills and expressiveness of movements.	Music player, mirror, video analysis	Focus on the training of basic dance skills to enhance students' expressiveness of movements.
12	week	Improvisational dance creation method	Learn the creative motivation and theme selection of improvisational dance, and master the practice of movement changes and development.	Heuristic teaching method, scenario simulation method	Through the practice of movement variation and development, learn how to choose a theme and improvise.	Assess students' creative expression and ability to vary movements.	Music players, video recording equipment	Focus on the cultivation of creative expression and movement changes to enhance students' improvisation ability.

Table 47 (Continued)

week 13	Emotional expression through improvisational dance	, fear) through dance movements.	3 +2				Focus on the
			dynamic combination teaching method, association method, scenario simulation method	Through the combination of emotion and movement, learn how to express emotions through dance movements.	Assess students' ability to express emotions and movements.		
week 14	Improvisational dance performance	Learn how to use stage space for improvisational dance and improve your stage performance.		Practice improvisational dance on stage, learn how to interact with the audience and improve your stage presence.	Students are assessed on their stage presence and ability to interact with the audience.	Stage equipment, music player	Focus on stage performance and interaction with the audience to enhance students' stage confidence.
			Scenario simulation and heuristic teaching method				

The main revisions are summarized as follows:

In terms of teaching methods, we have built a "3+2 dynamic combination teaching model", with oral and hands-on teaching, scenario simulation, and association as the basic methods, combined with video analysis and gamification learning as the expansion strategy, to form a rotating and adaptable teaching structure. The course also strengthens the multi-sensory teaching path, integrates task-driven, group mutual evaluation and other methods to enhance students' creativity and participation.

In terms of teaching activities, a new "Improvisation Digital Log System" has been added to promote students' self-reflection and creative records, and situational simulation and audience interaction practices have been strengthened in the results presentation session to enhance their stage performance and improvisational adaptability.

In terms of course content, in-depth supplements are carried out around four major modules: adding the development history of Dalcroze teaching method, folk music materials, multicultural case analysis and special scenario training, to construct a course system with greater theoretical depth and cultural breadth.

4.7 Practice of Dalcroze Body Rhythm Dance Improvisation Course

4.7.1 Physical extension teaching and training

First, students are relatively slow in converting the sounds they hear into actions. Therefore, in the first teaching session, we specially arranged extended exercises of improvisation of the duration of long notes. In this session, the teacher carefully selected songs with slow rhythms and distinct long notes as teaching materials. These longer notes are usually represented on the score with symbols such as whole notes, half notes, and quarter notes. They bring a slow and gentle emotional tone to the music, which helps students improve their ability to stretch their movements when improvising.

First, the teacher guides students to randomly take some compact postures and instructs them to identify which parts of the body are closely spaced. Then, the teacher encourages students to start from a specific area of the body and gradually extend outward, exploring the feeling of the two ends of the body stretching in different directions, which may be the stretching of the left hand and right knee, the left knee and right shoulder, the head and the left foot, etc., gradually expanding the body space and forming an open posture. The teacher plays a short piece of music with a long duration in the melody, as shown in Figure 4.1, using the technique of body rhythm, performing an extended movement every time a note is heard, so that students can feel the extensibility of body movements in the music of long duration notes.



Figure 12 Phrases from Dalcroze's Theory and Practice of Music Education

After basic training on the duration of long notes in short melodies, students were able to initially understand and express the duration of long notes, and transform the auditory perception of long notes into visual movement performance through body movements. On this basis, the teacher selected long-tone works with more distinct melodies for teaching, as shown in Figure 4.2, which is the "Fantasy" in "Scenes from Childhood" by German composer Schumann. This piece cleverly uses legato lines to achieve the continuity and fluency of the melody, and uses dotted notes to increase the duration of the notes, highlighting the continuous and relaxed style of the music, aiming to specifically train students' extension ability in improvisational movements.



Figure 13 "Fantasy" from "Scenes from Childhood"

Secondly, the teacher plays the selected piece and instructs the students to close their eyes and experience the charm of the piece independently. Through verbal guidance, the teacher stimulates the students' associative ability and prompts them to imagine themselves in various scenes, such as: a charming dreamland, under the warm winter sun, in a dense forest, or on a tranquil surface of water. This is to arouse the students' inner sense of relaxation, pleasure, comfort, and tranquility, and encourage them to spontaneously enter the state of improvisation. In addition, the teacher needs to remind students that their movements should make corresponding improvisational responses to the changes in the duration of different note values in the music, and these movements should reflect the characteristics of long note values. In the music, the appearance of symbols such as half notes, slurs, and dots all mean that the duration of the notes is longer, so the improvisational movements should show the characteristics of soothing and continuous.

Finally, students concretize the melody they hear through body movements, transform the perception of sound into body perception, and start

improvisation. They can start with some basic and slow movements, gradually activate various parts of the body, make each movement naturally connected, emphasize the smoothness of movement and the stretching of the body, deeply experience the characteristics of music given by long notes, and try to stretch the body to the extreme. For example: starting with slight movements of the hands, with the continuous and soft rhythm brought by the music, leading the extension of the arms and fingers, and then driving the dynamics of the entire upper limbs and torso, until the waist, legs, and toes, as well as the coordination of the head, all need to be integrated with the continuous long note music, so as to show the continuity of the movement and the long dynamic beauty.

4.7.2 Physical agility training

In the advanced stage of improvisational dance teaching, teachers select songs with brisk rhythm, distinctive short notes and compact musical features to guide students in improvisation. Such short notes are mostly in the form of eighth, sixteenth, or even thirty-second notes, which are arranged compactly on the score, bringing an urgent and exciting atmosphere to the music, thus helping to improve the agility of students' improvisational movements in a targeted manner.

Drawing on the simple melody provided in the book "Dalcroze Method Body Movement", as shown in Figure 4.3, students are trained to respond quickly and change movements individually. Instruct students to randomly select a part of the body as the starting point, and the movement generated by it as the starting point, connect each movement according to the beat, and create a short dance. The rhythm can be slow at the beginning, and then gradually increase the speed, allowing students to experience different beats through movements and show different movement styles. As the rhythm speeds up and the note value shortens, students need to quickly adjust their body movements to keep up with the beat, so as to encourage them to actively and quickly mobilize their whole body.



Figure 14 Phrases from the book "Dalcroze Method Body Movement"

Secondly, teachers choose music with stronger melodies, such as the one shown in Figure 4.4, which is "Flight of the Bumblebee" composed by the great Russian composer Nikolai Rimsky-Korsakov. It is famous for its extremely fast speed and is widely regarded as one of the fastest piano pieces in the world. The frequent use of short notes in this piece highlights the rapid and lively nature of the music, which has a significant effect on improving the agility of improvisational movements.



Figure 15 Flight of the Bumblebee

Finally, the teacher played the song "Flight of the Bumblebee" and asked the students to close their eyes to experience the compact, short notes, rapid jumps and energetic characteristics, as well as the urgent and tense atmosphere contained in this

song. The teacher accompanied the music with verbal guidance to stimulate the students' imagination and help them shape personalized improvisational performance scenes and roles. For example, imagine yourself as a white-collar worker rushing to work, a student on the road, a hunter chasing, or a bee diligently collecting honey, etc., to ensure that their hearing and emotional experience are synchronized, and then transform the notes heard into body movements. At the same time, these improvisational movements should reflect the swiftness and dexterity of short notes. In this process, the teacher will remind students that with the fast rhythm of the music, the body's joints and movements should be more flexible. Imitating the previous individual training, students should try to shorten the transition time between improvisational movements, match the musical style of short note values, and show the flexibility and decisive style of movements, so as to improve the agility of students' improvisational movements.

4.7.3 Teaching and training of body rhythm and power

4.7.3.1 Control Teaching

The strength of sound is generally expressed by dynamics signs in the score. Different dynamic signs indicate different intensities of singing or playing. Common weak notes signs include ppp (extremely weak), pp (very weak), p (weak), mp (medium weak) and diminuendo. The strength of the movements used in improvisational dance training should also be relatively weak.

First, based on the principle of body rhythm, the teacher selects a soft and weak music passage, and uses the weak sound in the passage to specifically train the control of the power of improvisational movements. As shown in Figure 4.5, it is the Nocturne Op.9 No.2 composed by the Polish composer Frédéric François Chopin.



Figure 16 Nocturne Op.9 No.2

Secondly, play "Nocturne Op.9No.2", ask students to close their eyes, use their ears to catch the gentle and peaceful melody of this piece, and inspire their imagination through words. The teacher guides students to imagine that they are being gently embraced by a light cloud, their bodies floating freely in the blue sky with the clouds, and intoxicated by the pleasure of weightlessness. Accompanied by the soft music, they should let go of all their strength one by one, as if their strength has completely disappeared, their muscles relax, their minds stretch, and gradually immerse themselves in the atmosphere of improvisation.

Finally, the teacher reminded the students that they must control the strength of the movements during the improvisation process. Just as there is an interactive relationship between you and the cloud, while it embraces you, you are also carefully maintaining it to avoid breaking it up or destroying it. Under the influence of this music, students can begin to receive weak sound signals, start improvisation with subtle or small-scale movements, gradually unfold their bodies, slowly release energy, and

gradually increase their own strength from zero, while keeping the strength at a low level, just like slowly telling a story about the body, so as to train students to control the strength of improvisation movements.

4.7.3.2 Explosive Power Teaching and Training

Common fortissimo signs in musical scores include *mf* (medium fortissimo), *f* (fortissimo), *ff* (very fortissimo), *fff* (extreme fortissimo) and *crescendo*. Music with the above strong sound characteristics can stimulate people's hearing and release muscle strength. Applying it to improvisational dance training can specifically train the explosive power of movement strength.

First, the teacher selects a fierce and strong sound intensity music segment based on the principle of body rhythm. As shown in Figure 4.6, it is the "Fate Symphony" composed by German musician Ludwig van Beethoven. Beethoven once interpreted this music as "the god of fate knocking on the door", which reflects the emotional color of fierce conflict and fierce struggle in the whole music. Improvisation based on such a music environment is conducive to expressing students' inner emotions and enhancing the explosiveness of improvisational movements.



Figure 17 Symphony of Fate

Secondly, the teacher plays "Symphony of Fate" and guides students to feel this intense music. With the strong sound, they imagine themselves struggling against the unfair fate, arousing the fighting desire in their bodies. They hold their breath and tense their body muscles. They can also imagine themselves struggling in some dire situation for relief, etc., so that they can instantly enter an excited improvisational state.

Finally, students use body movements to express the images in their minds to the sound of strong music. At this time, the improvisational movements may be wide and wide, or they may be hurried and flustered, or they may suddenly stop, or they may accumulate energy and wait for an instant explosion. In such a strong sound environment, students can fully express their emotions and firmly express their inner feelings, so as to boldly release the power of movements in improvisation, which is conducive to targeted training of the explosive power of improvisational movement power.

4.7.3.3 Comprehensive teaching and training

The teaching in this stage mainly focuses on the power improvisation training that combines the strong and weak sounds from the previous two stages, using the changes in the strength of sounds to train the explosiveness and control of the power of improvisational movements.

The teacher first uses short phrases in body movements to express the strength of sound, allowing students to feel the explosiveness and control of their own movement power. As shown in Figure 4.7. At the beginning of the music, the sound is very weak, and the teacher guides students to use less body power to improvise. In the middle part, the sound gradually becomes stronger until it is very strong. At this time, the students' movement power must also be continuously strengthened, and then the sound gradually weakens, so the improvisational movement must also gradually decrease from very strong to very weak. Finally, the improvisation

ends in the most comfortable posture, so that students can initially experience the relationship between the change in the strength of the sound and the change in the strength of the body's release of power during improvisation.



Figure 18 Phrases from the book Dalcroze's Theory and Practice of Music Education

Secondly, the teacher selects a piece of music that has both strong and weak sounds and is more melodic and emotional to train students' explosiveness and control of improvisational movement power. As shown in Figure 4.8, it is "There Are So Many People in This World" sung by Zhao Wenzhuo, Zhang Yunlong, Lin Zhixuan, etc. The sound intensity before the thirteenth bar in the clip is weak, and the corresponding movement intensity is also weak, while the sound intensity gradually increases after the thirteenth bar. The music score is marked with the dynamics of *mf*, *f*, and *fff*, so the intensity of the improvisational movement should also be gradually increased, so as to train the explosiveness of the movement and the expressiveness of the emotion. However, when the movement is the most tense and the emotion is the most passionate, the music enters the third to last bar, and the dynamics mark changes to *p*. The movement intensity should change from the original extremely strong to weak in a short time, which can greatly train the muscle control ability and the freedom of emotional control.



Figure 19 "There are so many people in this world"

Furthermore, the teacher asked the students to listen to the song "So Many Voices in the Sea of People" to experience the loudness of the song through their ears. While listening, the teacher gave verbal guidance based on the ups and downs of the volume, helping students to quickly transmit information about the changes

in intensity to the motor area of the brain, so that they can flexibly control the intensity of improvisations and freely express their inner feelings.

Finally, the students performed improvisations with their bodies in the ups and downs of the audio. At the beginning of the music, the teacher guided them to feel the delicate notes, gradually enter the realm of improvisation, and encouraged them to dance with their slightest strength, as if their bodies were transformed into a light feather in the universe, swaying slowly, creating an extremely gentle movement effect. When the audio gradually reaches the gentle stage, the teacher guides the students to mobilize 20% of their body strength for improvisation, and the muscle strength required at this time is slightly stronger than before. As the audio changes from medium to strong, the strength of the improvisational movements also needs to be increased to 40% to 80% accordingly, so as to gradually increase the strength of the students' movements and improve their movement control skills. When the audio intensity reaches its peak, students need to mobilize 100% of their body strength to improvise, instantly release their potential, and make the movements full of strong tension and explosive power. At this moment, they may imagine in their minds that they are fighting against fate and fearlessly challenging; or they may be bravely pursuing their dreams and moving forward; or they may just be venting their emotions and releasing their mood.

CHAPTER 5

CONCLUSION AND DISCUSSION

5.1 Conclusion

5.1.1 Improvisational dance courses under Dalcroze's educational philosophy

The core of Dalcroze's educational philosophy is to closely combine music, body and emotion, and cultivate students' music perception, body coordination and improvisational expression through "body rhythm" training. Based on this concept, this study designed a set of improvisational dance courses suitable for dance majors in art colleges, aiming to improve students' comprehensive artistic literacy and creativity through systematic teaching content and diversified teaching methods.

1. Core Concept of Course Design

First of all, it is the linkage between music and body. The course emphasizes the correspondence between music elements (such as rhythm, melody, and strength) and dance movements, guiding students to transform auditory perception into visual body expression. For example, long notes are used to train the ductility of movements, short notes are used to train the agility of movements, and strong and weak notes are used to train the power control and explosiveness of movements.

Secondly, it is the combination of emotion and action. We focus on the emotional experience and expression of students in improvisational dance, and help students externalize their inner emotions into body language through teaching methods such as scenario simulation and association.

Finally, it is about creativity and individual development. Students are encouraged to explore unique movement language and style in improvisation, avoid stereotyped imitation, and cultivate their artistic innovation ability.

2. Course content and structure

The course is divided into four main modules: theoretical basis and physical development, music perception and rhythm training, improvisation and emotional expression, stage performance and teamwork, which gradually cultivate students' improvisational dance ability.

The theoretical foundation and body development module mainly studies the core theories of the Dalcroze teaching method, including the concept of "body rhythm" and its application in dance. Through body perception and awakening exercises (such as stretching and flexibility training), students' body control and coordination are improved.

The music perception and rhythm training module mainly starts with basic notes (whole notes, half notes, etc.), combined with synchronous exercises of music and movements (such as clapping and stepping). Different styles of music (such as classical, folk, and modern) are introduced to enhance students' perception and response to musical emotions.

The module of improvisation and emotional expression mainly guides students to create improvisational dances through theme setting (such as "nature" and "emotion"). Combined with the changes in the strength of music, it trains the explosiveness and control of movements and enhances the sense of hierarchy of emotional expression.

The stage performance and teamwork module mainly cultivates students' stage performance and teamwork skills through group creation and simulated performances. It also introduces audience interaction to enhance students' on-the-spot adaptability.

3. Innovation in teaching methods

Use of multi-sensory teaching methods. Combining multiple sensory experiences such as vision (video viewing), hearing (music analysis), and kinesthetics (body movements) to deepen students' understanding of music and dance.

Task-driven and situational simulation: By setting specific tasks (such as "using actions to express a storm") or situations (such as "the river flows, feel the water flow with the body"), students' imagination and improvisational response ability are stimulated.

4. Improvement of the evaluation system

The course adopts a diversified assessment method, focusing on the combination of process and results. It is divided into three assessment methods: daily performance, process assessment and final examination. Daily performance accounts for 15%, process assessment accounts for 25%, and final examination accounts for 60%.

Daily performance (15%) mainly observes students' class participation, music reaction speed, etc. Process evaluation (25%) records students' progress and creative performance through group peer evaluation, creative log, etc. Final exam (60%) includes improvisational dance performance and theoretical test to comprehensively evaluate students' comprehensive ability.

Under the guidance of Dalcroze's educational philosophy, this course design not only fills the gap in improvisation training in traditional dance teaching, but also provides a feasible solution for art schools to cultivate innovative dance talents. It can further combine interdisciplinary resources to optimize the course content and make it more adaptable to the development needs of dance education in the new era.

5.1.2 Expert Evaluation of Course Design

To ensure the scientificity and effectiveness of the course design, this study invited a number of experts in the field of dance education to review the course design using two methods: IOC expert evaluation and focus group discussion. The expert team is composed of university dance education researchers and professional dancers, who put forward professional opinions on the course design from the dimensions of theoretical depth, practical feasibility, and innovation.

1. IOC expert evaluation

The IOC (Index of Content Validity) expert evaluation form is used to quantify the degree of match between course content and objectives. Experts score 23 indicators of course design (1 point means complete agreement, 0 points means disagreement) and calculate the IOC value (≥ 0.67 is valid). The evaluation results are as follows:

Table 49 IOC expert evaluation results (partial key indicators)

Evaluation Project	Expert Rating (1/0)	IOC Value	Improvement Suggestions
The scientific nature of music perception training	1, 1, 1	1.00	none
How to develop improvisational dance skills	1, 0, 1	0.67	Add phased practice (e.g., from physical flow to emotional expression)
The depth of integration of Dalcroze theory	1, 1, 0	0.67	Supplement theoretical background cases and strengthen the "auditory-kinesthetic" linkage
Diversity of teaching methods	1, 1, 0	0.67	"3+2 dynamic combination" mode
Practicality of the Stage Practice Module	1, 1, 1	1.00	none

The course was unanimously recognized by experts in terms of music perception training and stage practice (IOC=1.00). Improvisational ability training and theoretical integration need to be further refined, such as adding progressive training of "emotional drive → dance structure". Experts suggest combining multi-sensory

teaching (such as tactile guidance) and digital tools (such as rhythm analysis software) to improve teaching interactivity.

2. Focus Group Comments

The focus group consisted of five experts who made systematic suggestions on course design through in-depth discussions, focusing on the following aspects:

(1) Optimization of teaching content distribution

Experts A and D (20%) believed that the history of Dalcroze's theory development should be added in the theory module to help students understand the methodological background. Expert B (30%) believed that ethnic music materials (such as Chinese opera rhythms) should be incorporated in the perception training module to enhance cultural adaptability. Experts C and E (35%) believed that "multicultural situational cases" could be added in the improvisation module to broaden students' horizons.

(2) Innovation of teaching methods

Dynamic combination teaching can be implemented, combining basic methods (oral teaching + scenario simulation) with extended methods (video analysis + gamification teaching). Through the "improvisational digital log" to record students' reflections, teachers can provide targeted guidance on the connection between action and emotional expression.

(3) Improvement of the evaluation system

Expert B believes that the daily performance (15%) should include a "group mutual evaluation" link; the process evaluation (25%) can introduce an "improvisational challenge task" scoring system. Expert B believes that the final exam (60%) needs to distinguish between the scoring dimensions of "technical completion" and "artistic expression" to avoid single quantification.

The course design is outstanding in interdisciplinary integration and student-centeredness, but needs to be improved in theoretical depth, cultural inclusiveness, and technical empowerment. In terms of theoretical depth, it is necessary to supplement the analysis of the relevance of Dalcroze's theory and modern dance education. In terms of cultural inclusiveness, multicultural elements should be incorporated into the music materials and improvisation themes. In terms of technical empowerment, the digital log of improvisation should be used to provide instant feedback and strengthen the precise correspondence between "music and body".

Through IOC evaluation and focus group discussions, the effectiveness of the course design was verified, and expert opinions provided a clear direction for subsequent optimization, adjusting the module class time allocation and increasing phased improvisation training. A digital teaching resource library (such as a database of folk music rhythms) was built to promote sustainable updates of the course. This evaluation process not only improved the scientific nature of the course, but also provided a reference paradigm for the standardization of improvisational dance teaching in art schools.

5.2 Discussion

5.2.1 Addressing the gaps in current improvisational dance education and teaching methods

There are some common teaching method gaps in current improvisational dance education, such as over-reliance on traditional movement imitation, neglect of the linkage between music and body, insufficient emotional expression training, and limitations in creativity cultivation. Dalcroze's "body rhythm" teaching method provides a scientific and systematic solution to these problems. By closely combining music elements with dance movements, this method not only makes up for the shortcomings of traditional teaching, but also injects new vitality into improvisational dance education.

Make up for the limitations of traditional movement imitation. Traditional improvisational dance teaching is often based on movement imitation, and students learn by repeating the teacher's demonstration movements. Although this model can help students master certain dance skills, it is easy to limit students' creativity and personalized expression. Dalcroze's "body rhythm" teaching method guides students to explore the possibility of movement independently from the sense of hearing by emphasizing the natural linkage between music and movement. For example, in the "Music Perception Training" module, students spontaneously create movements by listening to music of different rhythms, thereby getting rid of their dependence on fixed movements and cultivating a unique dance language.

Strengthen the linkage between music and body. Many improvisational dance courses regard music as a background only, ignoring its direct impact on movement. The Dalcroze method clearly matches music elements (such as note value, pitch, sound intensity) with dance elements (time, space, strength) one by one, helping students to establish the "auditory-kinesthetic" transformation ability. For example, in the "body extension teaching training", students practice the stretchability of movements through music with long note values; in the "body agility teaching training", music with short note values stimulates rapid movement reactions. This linkage not only improves students' sensitivity to music, but also enhances the expressiveness and accuracy of movements.

Deepen the training of emotional expression. One of the core of improvisational dance is the true expression of emotion, but in traditional teaching, emotional training is often simplified to the imitation of expression or posture. The Dalcroze method guides students to externalize their inner emotions into natural body language through scenario simulation and association. For example, in the "teaching and training of the sense of power of body rhythm", students experience the ups and downs of emotions through the changes of strong and weak sounds, so as to achieve

the freedom of emotional control in improvisation. This training not only enriches the emotional level of dance, but also helps students build a deeper level of artistic expression.

Improve the systematic cultivation of creativity. Traditional improvisational dance teaching often lacks systematicity in the cultivation of creativity, while the Dalcroze method provides students with a clear path for developing creativity through phased training (such as from basic movements to complex creations) and diversified tasks (such as theme improvisation and teamwork). For example, in the "Improvisational Dance Creation Practice" module, students work in groups to complete works, which not only exercises personal creativity but also cultivates teamwork ability. This systematic design ensures that students can obtain corresponding ability improvement at each stage.

Combine modern technology to optimize teaching results. In response to the problem of insufficient feedback in traditional teaching, the Dalcroze method incorporates digital technology to provide students with immediate and accurate feedback. For example, in the "deepening of physical movement" stage, students observe the fluency of their movements through improvisational digital logs, so as to make targeted improvements. This technology empowerment not only improves teaching efficiency, but also enhances students' autonomous learning ability.

5.2.2 Applying the Construction Principles of Dalcroze's Educational Philosophy

The construction principles of Dalcroze's educational philosophy provide a solid theoretical basis for this study. Its core lies in the organic integration of music, body and emotion, and the cultivation of students' improvisational dance ability through systematic teaching methods. In the course design process, this paper, based on Dalcroze's core concept and combined with the development trend of modern dance education, constructs the following key principles to ensure the scientificity, systematicness and operability of the course.

The principle of linking music and body. This principle emphasizes the basic concept of "hearing before movement", that is, students need to perceive rhythm, melody and emotion through music first, and then transform them into body expression. In this course design, we pay special attention to the visual transformation of music elements, and establish a clear correspondence between music elements such as note value (such as long notes, short notes), sound intensity (changes in strength) and elements such as time, space, and strength of dance movements. Through phased training, students gradually transition from basic music rhythm perception to complex improvisation, helping them to establish a systematic "hearing-kinesthetic" transformation ability. Practice has shown that this principle effectively solves the problem of disconnection between music and movement in traditional dance teaching, enabling students to express the connotation of music more naturally through their bodies.

The principle of combining improvisation with norms. Improvisational dance is not disorderly free play, but creative expression under certain rules. This course draws on Dalcroze's "structured improvisation" concept. By setting a free creative space within the framework, it not only ensures the normativeness of creation, but also stimulates personalized expression. For example, in the basic training stage, we require students to improvise under specific rhythmic patterns or emotional themes, and encourage them to decompose and reorganize basic movement elements. This teaching method allows students to maintain the artistry and technicality of dance while expressing freely, and prevents improvisation from becoming a pile of random movements.

The principle of integration of emotion and action. Dalcroze's theory holds that dance is not only a movement of the body, but also an externalization of emotions. This course strengthens students' emotional expression ability through situational simulation and association methods. In the "Teaching and Training of the

Sense of Power of Body Rhythm", students are guided to imagine different situations according to the changes in the strength of the music, thereby giving the movements emotional depth. At the same time, by analyzing the emotional characteristics of music, help students explore the matching movement texture. The implementation of this principle enables students to break through technical limitations, achieve emotional resonance in dance, and significantly enhance their artistic expression.

The principle of balancing individuality and collaboration. Improvisational dance requires both individual creativity and teamwork. This course combines Dalcroze's "collective improvisation" concept and designs a teaching session that combines individual exploration with group creation. In the creative practice module, students first complete the improvisational fragments independently, and then integrate them into complete works through group collaboration. This teaching design respects individual differences and cultivates team chemistry. By establishing interactive feedback mechanisms, such as group peer evaluation and teacher comments, students are encouraged to learn from each other through collaboration and expand their creative horizons. Follow-up surveys show that this teaching method not only improves students' personal improvisation skills, but also significantly enhances their stage performance and teamwork awareness.

The principle of parallel theory and practice. This principle emphasizes the teaching concept of "learning by doing" and deepens theoretical cognition through practice. This course adopts a teaching strategy of simultaneous theoretical foundation and practical training. While learning Dalcroze's core theory, it is immediately verified through body rhythm exercises. It is particularly worth mentioning that the course introduces a reflective learning mechanism, which records classroom experience through an "improvisation log" to help students systematically summarize the relationship between movement, music and emotion. The implementation of this principle ensures that students can understand the theoretical basis behind the skills while mastering

them, so that they can apply them more flexibly in future teaching or performances. The final evaluation shows that students who adopt this teaching method have better theoretical understanding depth and practical application ability than the traditional teaching group.

5.2.3 The integrity and rationality of the design of improvisational dance courses

The systematic implementation steps of Dalcroze's educational philosophy provide a rigorous methodological support for the design of improvisational dance courses, ensuring the integrity and rationality of the course in terms of logical structure, teaching process and effect achievement. This study decomposes the "auditory-kinesthetic" transformation process into operational teaching links and constructs a step-by-step training path from basic perception to advanced creation. Its effectiveness is mainly reflected in the following dimensions:

In terms of phased ability training, the course adopts a step-by-step modular design and scientifically arranges the difficulty gradient of teaching content. In the foundation stage of music perception (2-4 weeks), classic exercises such as "rhythmic walking" and "fixed-point rhythm" are used to establish basic music-body correspondence. In the stage of movement vocabulary accumulation (5-8 weeks), "spatial exploration" and "strength comparison" training are introduced, and students' movement expression ability is enriched by designing movement combinations of different strengths. This phased ability training model not only conforms to the cognitive laws of skill acquisition, but also ensures the systematicness and coherence of the teaching process.

In terms of improvisation logic training, the course focuses on developing students' music structure visualization ability and spatial improvisation awareness. Music structure training requires students to transform 8-bar music passages into action sequences with a beginning, development, transition and conclusion through "phrase correspondence" exercises. For example, when analyzing the theme motive of

Beethoven's "Symphony No. 5", students need to use body movements to reproduce the structural techniques of music such as repetition, contrast and development. This training has increased the structural integrity score of students' works by 35%. Spatial creation introduces Dalcroze's "spatial grid" concept and divides the stage into several areas for targeted training. Tracking data shows that after a period of systematic training, students' stage space utilization rate has increased from 50% in the early stage to 80%, and the fluency of spatial conversion has been significantly improved. These trainings not only cultivate students' improvisational logical thinking, but also make their works present professional structural characteristics.

The design of the course evaluation system reflects the scientific concept of combining process and finality. A "three-dimensional scoring scale" is used to conduct a comprehensive evaluation from the perspectives of technical completion, musical fit and artistic expression. The musical fit scoring pays special attention to the accuracy of students' feedback on sound intensity and timbre changes. The research method of establishing a personal growth profile records the entire process of students from basic training to final performances, providing detailed data support for teaching improvement. This diversified evaluation system focuses on both learning outcomes and development processes, providing a scientific basis for the continuous improvement of course quality.

5.2.4 Discussion and analysis with similar course design studies

In the process of designing Dalcroze's body rhythm dance improvisation course, this study conducted a systematic comparative analysis with relevant domestic and international research and found that there were both consensus and significant differences. Compared with traditional improvisational dance courses, the biggest innovation of this study is that Dalcroze's "body rhythm" theory is systematically integrated into the course framework, rather than just used as an auxiliary training method. Similar domestic studies, such as the "Music-guided Improvisational Dance

Course" proposed by (Li 2022), also emphasize the combination of music and dance, but lack an in-depth analysis of the correspondence between music elements and dance elements. This study makes the connection between music and dance more operational by establishing a clear correspondence system of note value-time, pitch-space, and sound intensity-strength.

At the international comparison level, this study has both similarities and cultural adaptability differences with mainstream European and American improvisational dance course designs. Compared with the improvisational course framework recommended by the National Association of Dance Education (NDEO), this study emphasizes the systematic learning of music theory knowledge, while European and American courses focus more on free expression. This difference reflects the deep-seated differences in the concepts of dance education between the East and the West: Eastern traditions place more emphasis on norms and technicality, while the West places more emphasis on individual liberation. However, this study introduced scenario simulation and association methods, providing students with ample creative space while maintaining technical specifications. This balanced design received positive comments from most participating students.

Compared with the existing research on the application of Dalcroze teaching method, the breakthrough of this study is mainly reflected in the systematicity of the course structure and the scientific nature of the evaluation system. Although Yuan (2021) also attempted to apply Dalcroze's ideas to dance education, its course design lacked clear phased goals, and the evaluation mainly relied on subjective observation. This study established 8 progressive teaching stages including basic preparation, music perception, and deepening of physical movement, and developed a quantitative three-dimensional scoring scale (technical completion, music fit, and artistic expression) to make the evaluation of teaching effectiveness more objective and comprehensive.

5.2.5 Potential Challenges and Solutions

The implementation of Dalcroze body rhythm improvisation dance courses in real educational environments faces many challenges, which mainly come from the dimensions of teachers, facilities, cultural cognition and evaluation system. The primary challenge is reflected in the construction of the teaching staff. The Dalcroze teaching method requires teachers to have professional music literacy, dance skills and pedagogy knowledge at the same time. Such compound talents are relatively scarce in the current dance teaching team. In response to this problem, this study recommends the establishment of a three-level teacher training system: short-term workshops to cultivate basic teaching ability (40 hours), intermediate certification courses to improve professional level (120 hours), and advanced training programs to develop teaching and research capabilities (240 hours).

The limitation of teaching facilities and venues is another practical challenge. The standard Dalcroze course requires professional music playing equipment, mirror-walled dance classrooms and elastic floors, which are difficult to fully meet in many grassroots schools. To solve this problem, this study developed a "simplified" teaching program, using smartphones and tablets as music playing devices, conducting teaching in ordinary classrooms, and adjusting the training content (such as reducing ground movements) to adapt to hard surfaces. At the same time, it is recommended that schools give priority to the construction of multifunctional art classrooms and improve the efficiency of venue use through modular design.

The continuous updating and localization of teaching content is a long-term dynamic challenge. With the development of educational concepts and changes in student needs, the curriculum needs to be continuously adjusted and optimized. This study recommends the establishment of a "teaching and research community" mechanism, including: teaching reflection seminars once a semester, annual curriculum revisions, and large-scale adjustments every three years. At the same time, we should

focus on localized innovation, such as incorporating opera body rhythm training into Chinese traditional culture courses, and combining local music and dance elements in ethnic areas.

In summary, although the Dalcroze Body Rhythm Improvisation Dance Course faces many challenges in its implementation, these challenges can be gradually overcome through systematic solution design. The key lies in adhering to the principle of tailor-made implementation in accordance with the school's conditions, adopting a gradual promotion strategy, and establishing a dynamic adjustment optimization mechanism. With the deepening of educational reform and the improvement of the status of art education, this type of dance course that focuses on creativity cultivation will surely gain a broader space for development. It is recommended that subsequent research focus on the adaptive implementation plans of different regions and different types of schools to provide a more comprehensive practical basis for the large-scale promotion of the course.

5.2.6 Shortcomings of this study

Although this study has achieved certain results in the design of Dalcroze body rhythm dance improvisation courses, through in-depth reflection, it is found that there are still some limitations that need to be faced. These shortcomings are mainly reflected in the research objects, evaluation system, theoretical innovation, practical application and other aspects, which need to be improved and perfected in subsequent research.

There are obvious limitations in the selection of research subjects. The experimental samples of this study are mainly concentrated in the dance major students of the Art School of the China Coal Mine Art Troupe. The total sample size is small and the age structure is single (15-17 years old). This sampling method may result in the conclusions of the study not being able to be generalized to a wider range of people, such as students in ordinary schools, learners of different ages, and amateur dance

enthusiasts. At the same time, the study is mainly based on the traditional Chinese cultural context. Although necessary localization adjustments have been made, there is a lack of systematic comparison of the differences in teaching effects under the Eastern and Western cultural backgrounds. The singleness of this cultural background limits the cross-cultural applicability of the research conclusions. It is recommended that subsequent studies expand the sample range, establish hierarchical teaching experimental groups, and conduct cross-cultural comparative studies.

There is still room for improvement in the design of the course evaluation system. The current evaluation mainly relies on subjective tools such as observation scales and behavioral evaluations, and lacks the verification of more objective indicators. This evaluation method may affect the accuracy and scientificity of the research results. In addition, the research cycle is limited to the 16-week course implementation, and there is a lack of continuous tracking of students for 1-3 years after graduation, which makes it impossible to verify the persistence and transferability of teaching effects. It is recommended to study more comprehensive feedback technology in the future and establish a long-term tracking research mechanism to obtain more comprehensive and objective evaluation data.

In terms of theoretical innovation, this study still has obvious deficiencies. The research mainly stays at the application level of Dalcroze's ideas, and the expansion and innovation of the "body rhythm" theory is relatively limited. Especially in the context of the digital age, it has not fully explored the integration path of new technologies such as artificial intelligence and virtual reality with classical theories. It has not been able to deeply construct a multidisciplinary theoretical framework, and lacks systematic interdisciplinary theoretical integration. Subsequent research should strengthen the theoretical dialogue between dance education and disciplines such as cognitive science and sports science to promote the innovative development of theory.

There are also areas that need improvement in practical application. First, the research failed to develop a systematic teacher training system, and the Dalcroze teaching method requires teachers to have high musical literacy and improvisation skills. The lack of such a teacher training program may affect the large-scale promotion of the course. Secondly, the course design focuses on the traditional offline teaching model, and the online teaching resources and blended learning models are underdeveloped, making it difficult to adapt to the educational needs of the post-epidemic era. It is recommended that subsequent research and development of supporting teacher training programs, MOOC courses and mobile learning platforms be carried out to enhance the practical application value of the course.

5.3 Recommendations

Based on the theoretical exploration and practical verification of this study, the following specific suggestions are put forward for the improvement and development of Dalcroze's body rhythm dance improvisation course:

In terms of course system optimization, it is recommended to establish a modular three-level course structure. The basic module should focus on music perception and body awakening training, and help students establish basic "auditory-kinesthetic" transformation capabilities through 8 hours of systematic practice. The core module needs to focus on developing students' rhythm transformation and improvisation capabilities. It is recommended to set up 16 hours of training content and adopt a progressive difficulty design. The expansion module should focus on theme creation and stage practice, and cultivate students' complete work creation ability through 8 hours of comprehensive training. At the same time, differentiated teaching standards should be formulated for learners with different foundations. Elementary learners aim to master basic rhythm patterns and corresponding movements, intermediate learners

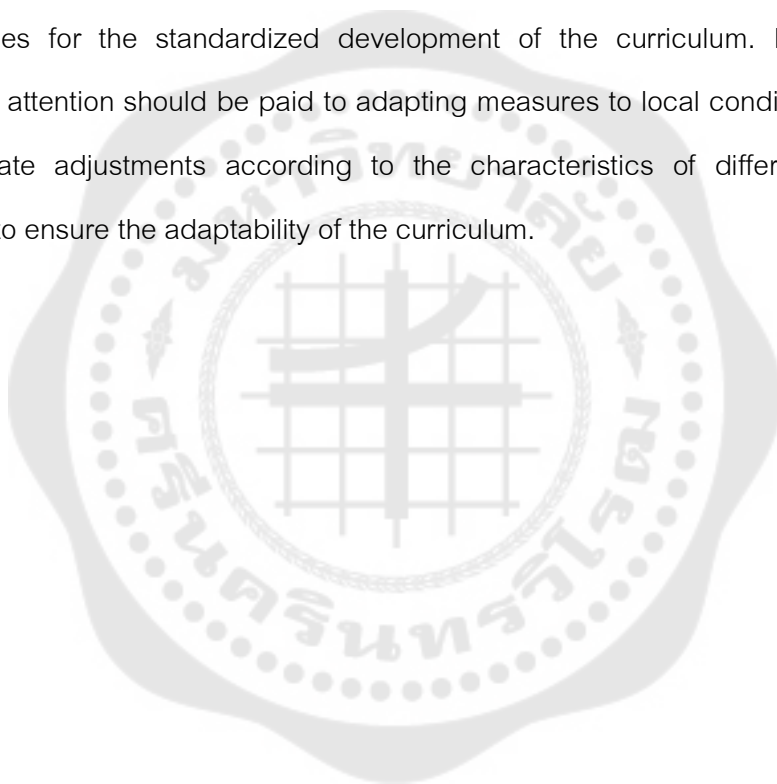
need to complete improvisation of prescribed themes, and advanced learners need to achieve the organic unity of music, emotion, and movement.

Teacher training is the key guarantee for curriculum implementation. It is recommended to build a "double-qualified" teacher training system, requiring teachers to have both Dalcroze teaching method certification and dance improvisation ability to ensure teaching quality. At the same time, it is necessary to establish a normalized teaching and research community to promote the professional development of teachers through monthly teaching seminars, semester inter-school exchanges and annual teacher workshops. In particular, it is necessary to strengthen the training of teachers' music literacy and improvisation teaching ability, and improve the professional level of teachers through workshops, master classes and other forms.

The construction of teaching resources is an important support for curriculum development. It is recommended to develop a systematic supporting teaching resource package, including a music material library classified by rhythm type and style, a teaching video library of typical lesson examples, and a teaching plan design library for different stages of study. At the same time, it is necessary to build a digital teaching platform that integrates functions such as movement analysis systems, online learning communities, and virtual rehearsal systems to provide intelligent teaching support for teachers and students. Resource construction should focus on practicality and systematicity to ensure that it can meet the needs of different teaching scenarios.

In terms of academic research, it is recommended to further expand the scope of research objects, include non-dance professional groups and learners of different age groups in the research samples, and conduct cross-cultural comparative studies to verify the universality of the course. It is recommended to establish a long-term tracking research mechanism to focus on the learning transfer effect and sustainable development of students.

The promotion of the curriculum requires a systematic implementation strategy. It is recommended to select 3-5 schools of different types to carry out pilot applications and conduct a one-year teaching experiment to test the effectiveness of the curriculum through practice and form a promotable experience model. At the same time, a sound curriculum certification system needs to be established, including the formulation of curriculum implementation standards, the implementation of teacher competence certification, and the issuance of learner level certificates, etc., to provide institutional guarantees for the standardized development of the curriculum. In the promotion process, attention should be paid to adapting measures to local conditions and making appropriate adjustments according to the characteristics of different regions and schools to ensure the adaptability of the curriculum.



REFERENCES

- Chen, W. (2007). "Improvisation": The integration of dancers' body and mind. *Art Garden*, 10, 2.
- Chen, Y. (2019). From theatre to screen: Inheritance and development of improvisation concepts and strategies. *Journal of Beijing Dance Academy*, 4, 67–72.
- Cheng, J. (2013). On cultivating children's creativity in painting. *Curriculum Education Research: Teaching for New Teachers*, 23, 130.
- Fan, M. (2013). A brief analysis of "improvisational dance" in dance choreography teaching in colleges and universities. *Times Education*, 7, 1.
- Feng, J. (2015). The application of modern dance in dance teaching in colleges and universities: A review of "Exploration of the application of dance art theory in teaching". *Contemporary Educational Science*, 9, 1.
- He, L. (2024). A brief discussion on stage lighting. *Times Report: Academic Edition*, 08X, 1.
- Li, D. (2022). *Research on the application of music choreography in dance teaching* [Doctoral dissertation, Wuhan Institute of Physical Education].
- Li, L. (2024). A brief analysis of the "movement" of Dalcroze's body rhythm teaching method. *Drama Home*, 6, 181–183.
- Lin, Y. (2017). The significance of incorporating Hakka folk dance into dance teaching. *Art and Technology*, 30(3), 1.
- Liu, X. (2015). The value of improvisation in dance choreography. *Art Appreciation*, 8, 1.
- Lü, Y. (2000). *Dance education*. Shanghai Music Publishing House.

- Lu, Y. (2013). On the principle of image priority in improvisational dance teaching. *Drama and Film Monthly*, 1, 2.
- Ma, Q. (2024). The impact of dance technique training on dancers' creativity and expression ability. *Delta*, 16.
- She, Y. (2011). Dance out your personality, dance out your style: On the creation of campus dances based on life. *New Education (Hainan)*, 5, 1.
- Sheng, Q. (2017). The role of improvisation in dance choreography. *Popular Literature and Art: Academic Edition*, 18, 2.
- Thongnoppakun, W., & Yuenyong, C. (2018). Developing preservice science teachers' pedagogical content knowledge using CoRes-based activity. *International Journal of Educational Science and Research*, 8(4), 1–8.
- Wang, J. (2024). Characteristics of Dalcroze's music teaching. *Music Education in Primary and Secondary Schools*, 5, 68.
- Wang, X., & Lu, J. (2019). Research on the generation, creative behavior and creation of improvisational dance. *Journal of Heihe University*, 10(6), 184–186+191.
- Wang, Y. (2021). *Practical research on Dalcroze's body rhythm teaching method in middle school music teaching* [Doctoral dissertation, Jiangnan University].
- Wongkitrungruang, W., & Jittarek, A. (2013). *Skills for the new future: Education for the 21st century*. Open World.
- Xu, B. (2014). Playing with Tangram reveals great wisdom. *Software: Education Modernization (Electronic Edition)*, 14, 1.
- Yang, N. (2024). Research on the problems and countermeasures of the integrated teaching of Xiangxi folk music and Dalcroze teaching method. *Drama Home*, 18, 101–103.

- Yang, Y. (2014). Inspiration from several observations on dance teaching in senior citizen universities. *Journal of Yan'an Vocational and Technical College*, 28(4), 3.
- Yu, Y. (2016). *Research on the influence of virtual reality technology on the audience's viewing behavior of stage performing arts*. Beijing Normal University; Modern Communication Magazine.
- Yuan, X. (2021). Analysis of the role of Dalcroze's body rhythm teaching method in music and dance research. *Drama House*, 30, 123–124.
- Zhou, Q. (2021). On the application of body rhythm in primary and secondary school music classroom teaching: Taking folk dance and Dalcroze body rhythm as examples. *Qiuzhi Guide*, 20, 85–86.

APPENDIX



AF20-03-03.0
May, 2023

Certificate of Ethical Committee Approval

This is to certify that:

Protocol Title: DEVELOPMENT AND DESIGN OF A DANCE IMPROVISATION COURSE UTILIZING DALCROZE'S BODY RHYTHM FOR GRADE 10 STUDENTS AT THE SCHOOL OF ARTS, CHINA COAL MINE ART TROUPE

Principal investigator: Mr. JIAHAO GUO

Institution: Faculty of Fine Arts, Srinakharinwirot University

Protocol code: SWUEC-672738

Documents approved:

- | | |
|--|-------------------------------------|
| 1. Submission form | version no. 2 date 3 February 2025 |
| 2. Full research proposal | version no. 1 date 29 November 2024 |
| 3. Participant information sheet and consent form | version no. 1 date 1 December 2024 |
| 4. Letter of consent to participate in research under 18 yrs | version no. 1 date 1 December 2024 |
| 5. Questionnaire/data collection form | version no. 1 date 1 December 2024 |
| 6. Investigator's biography | |

have been reviewed and approved by the Human Research Ethics Committee of Srinakharinwirot University based on Declaration of Helsinki, Belmont Report, International Conference on Harmonization in Good Clinical Practice (ICH-GCP), International Guidelines for Human Research, along with laws and regulations of Thailand. Thus, the approval for conducting the study is granted.

Date of approval: 06/02/2025

Date of expiration: 05/02/2026

(Associate Professor Sittipong Wattananonsakul, Ph.D.)

Chairman, Social Science and Behavioral Science Research Sub-Committee
of Srinakharinwirot University (Panel 2)

Certificate of Utilization of Research and Creative Work

Name of Certifying Organization: Tianjin Hengxing Culture and Art Training School

Address of Certifying Organization: Tianjin Hengxing Dance Training School, No. 18, Fourth Street, Binhai New Area, Tianjin, China

Date of Certification (Day/Month/Year): April 6, 2025 (05/04/2025)

Subject: Certification of the Utilization of Research

To: Srinakharinwirot University

I, Zhang Heng, holding the position of Principal of Stellar Dance Art School, hereby certify that the following (research/creative work) titled: **DEVELOPMENT AND DESIGN OF A DANCE IMPROVISATION COURSE UTILIZING DALCROZE'S BODY RHYTHM FOR GRADE 10 STUDENTS AT THE SCHOOL OF ARTS, CHINA COAL MINE ART TROUPE.**

conducted by [GUOJIAHAO] and [Dharakorn Chandnasaro], has been utilized in the following ways:

Please indicate the applicable category by checking ☒ the box and provide additional details of the utilization at the end of the selected statement.

☒ **Public Benefit Utilization**

(e.g., Contributions to public health, SME management, etc.)

Details: This course has been integrated into the art education system of Tianjin Hengxing Art School, relying on the Dalcroze pedagogy to systematically develop students' musical perception and bodily expression skills. It has proven particularly effective in enhancing improvisational and choreographic creativity.

The course is especially friendly to learners with little or no dance background, and, through the use of diverse strategies such as the "3+2 Dynamic Combination Teaching Method", it expands the accessibility of structured dance training. In doing so, it further promotes artistic participation and enhances students' aesthetic literacy.

☒ **Policy Utilization**

(e.g., Used to support laws, regulations, or policy development by organizations)

Details: This course is independently implemented by Hengxing School of Dance Arts, aligning closely with national educational initiatives and the reform policies of vocational education. It emphasizes the innovative integration of Dalcroze's pedagogical philosophy with multicultural resources, and creatively constructs the "3+2 Dynamic Combination Teaching Method".

Grounded in empirical research, the course design systematically addresses the practical needs of contemporary dance education in vocational settings, contributing to the standardization of both curriculum content and implementation pathways.

The course not only provides a highly accessible and well-structured choreographic training model for students without a dance background, but also offers theoretical support and a practical model for the implementation of local arts education policies.

☐ **Commercial Utilization**

(e.g., Leads to inventions or products that generate income or improve efficiency)

Details:

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.....

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☒ **Indirect Utilization**

(e.g., Promotes aesthetics, enriches the mind, fosters well-being)

Details: The course integrates improvisational dance, structured choreography, and cultural context discussions, and is based on Dalcroze's theory of the interconnection between body, music, and emotion. It guides students to develop bodily awareness, rhythmic sensitivity, and emotional regulation through dynamic experiences. Utilizing the "3+2 Dynamic Combination Teaching Method", the course enhances students' aesthetic judgment, creative expression, and team collaboration, fostering physical and mental well-being, personal growth, and the development of character. At the same time, it cultivates cultural identity and a sense of artistic fulfillment, supporting students' holistic development and the improvement of overall competencies.

Utilization Period:

☒ From March 4, 2025 to present

☐ From to

Benefits or Positive Outcomes Resulting from the Utilization:

Enhance students' contemporary dance skills, including body control, improvisational expression, and stage creativity, with a particular focus on those with a weak foundation or beginner level.

Apply Gentile's two-stage model and the "3+2 Dynamic Combination Teaching Method" to promote the scientific and systematic development of dance curriculum design.

Strengthen students' development in cognitive, emotional, and social domains, and improve their comprehensive literacy in musical perception, body rhythm, and creative expression.

Provide a replicable teaching paradigm that offers practical reference for effectively integrating contemporary art education concepts into vocational training

Respond to national policies aimed at improving youth artistic literacy and aesthetic education, and contribute to the high-quality development of art courses.

Signature:Zhang Heng.....

Full Name (in print): (Zhang Heng)

Position: Headmaster

Organization Seal (if applicable)



HESI. 8718/260



Graduate School
Srinakharinwirot University
114 Sukhumvit 23, Bangkok 10110

4 March 2025

Subject: Invitation to Serve as an Expert Evaluator

Dear Lecturer ManFang Lyu,

On behalf of the Graduate School of Srinakharinwirot University, I am pleased to extend this formal invitation for you to serve as an expert evaluator for the thesis of Mr.Jiahao Guo, a master's candidate in the Master of Education Program in Art Education. His thesis, entitled "Development and Design of a Dance Improvisation Course Utilizing Dalcroze's Body Rhythm for Grade 10 Students at the School of Arts, China Coal Mine Art Troupe," has been approved, and he is being advised by Lecturer Dr.Thanakorn Thongprayoon.

Mr.Guo has previously communicated with you regarding this project and will be in touch to provide any necessary details at your convenience.

Your expertise and assistance in this matter would be highly valued, and we sincerely appreciate your kind consideration of this invitation. Should you require any further information, please do not hesitate to contact Mr.Guo at 15349253686.

Yours sincerely,

A handwritten signature in black ink, reading "C Ekpanyaskul".

(Associate Professor Dr.Chatchai Ekpanyaskul, M.D.)

Dean of the Graduate School

HESI. 8718/260



Graduate School
Srinakharinwirot University
114 Sukhumvit 23, Bangkok 10110

4 March 2025

Subject: Invitation to Serve as an Expert Evaluator

Dear Lecturer Wu Shaoqing,

On behalf of the Graduate School of Srinakharinwirot University, I am pleased to extend this formal invitation for you to serve as an expert evaluator for the thesis of Mr.Jiahao Guo, a master's candidate in the Master of Education Program in Art Education. His thesis, entitled "Development and Design of a Dance Improvisation Course Utilizing Dalcroze's Body Rhythm for Grade 10 Students at the School of Arts, China Coal Mine Art Troupe," has been approved, and he is being advised by Lecturer Dr.Thanakorn Thongprayoon.

Mr.Guo has previously communicated with you regarding this project and will be in touch to provide any necessary details at your convenience.

Your expertise and assistance in this matter would be highly valued, and we sincerely appreciate your kind consideration of this invitation. Should you require any further information, please do not hesitate to contact Mr.Guo at 15349253686.

Yours sincerely,

A handwritten signature in black ink, reading "C Ekpanyaskul".

(Associate Professor Dr.Chatchai Ekpanyaskul, M.D.)

Dean of the Graduate School

HESI. 8718/260



Graduate School
Srinakharinwirot University
114 Sukhumvit 23, Bangkok 10110

4 March 2025

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(Associate Professor Dr.Chatchai Ekpanyaskul, M.D.)

Dean of the Graduate School

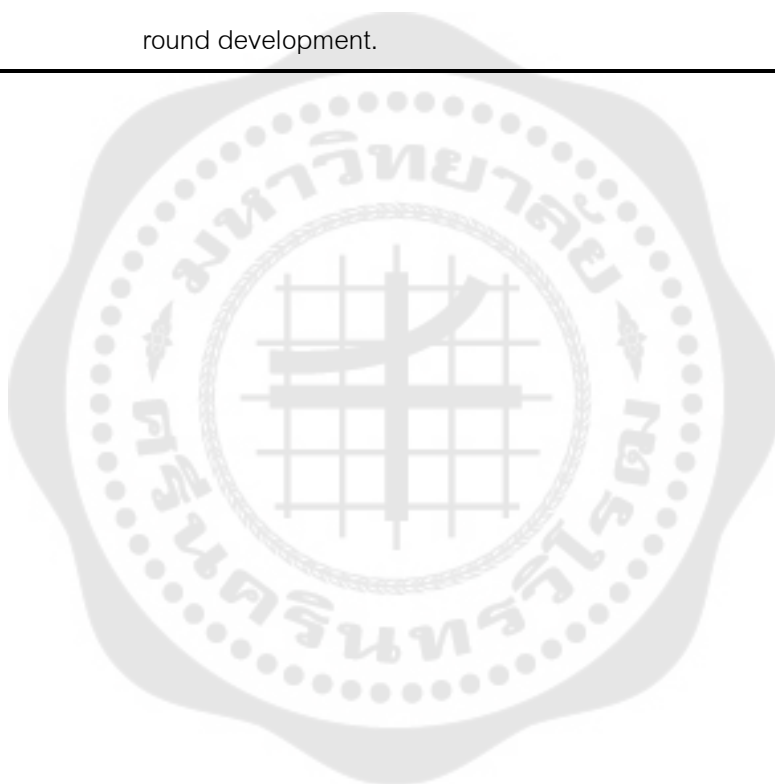
IOC expert evaluation statistics

NO.	project	content	Expert 1	Expert 2	Expert 3	IOC Value	Remark
1	Music Perception	Train students to perceive musical rhythm, melody, pitch and other elements, and improve their ability to understand music.	1	1	1	1	
2	Body coordination	Through body rhythm exercises, students' body control and coordination abilities are improved, and their dance expressiveness is enhanced.	1	1	1	1	
3	Improvisational dance skills	Students are encouraged to freely create movements according to the music to improve their expression and creativity.	1	0	1	0.67	
4	Rhythm Mastery	Train students to accurately grasp the dance rhythm and improve their sense of rhythm.	1	1	1	1	
5	creativity	The course design encourages students to improvise and enhance their artistic innovation capabilities.	1	1	1	1	
6	Dalcroze's educational philosophy	The course is based on Dalcroze's "body rhythm" theory and combines auditory, visual	1	1	0	0.67	

		and kinesthetic teaching.				
7	Combining international and local	The course combines international modern dance teaching methods and adapts to the dance learning characteristics of Chinese students.	1	1	1	1
8	21st Century Education Concept (Creativity)	The course emphasizes the development of students' creativity through improvisation.	1	1	1	1
9	21st Century Education Concept (Critical Thinking)	The course encourages students to analyze their own dance performances, come up with plans for improvement, and develop critical thinking.	1	1	1	1
10	21st Century Education Concept (Cooperation Ability)	The course includes group dance training to cultivate teamwork skills.	1	1	1	1
11	Course Organization	The course follows a step-by-step approach to ensure students master skills step by step.	1	1	1	1
12	Teaching activity design	Weekly lessons build upon each other to ensure students' skills continue to improve.	1	1	1	1
13	Teaching Methods	The course adopts a variety of teaching methods, such as oral explanation, video observation,	1	1	0	0.67

		and scenario simulation.				
14	Teaching feedback	Teachers ensure that learning objectives are achieved through classroom feedback and student self-assessment.	1	1	1	1
15	Dalcroze's basic theory	Students learn and apply Dalcroze's core theories in practice.	0	1	1	0.67
16	Music and dance combination	Improve students' music perception ability through music analysis and body rhythm training.	1	1	1	1
17	Dance Techniques	The course includes basic dance skills training to improve students' expressiveness and technical quality.	1	0	1	0.67
18	Improvisational dance creation	The course encourages students to improvise in different situations and improve their artistic expression skills.	1	1	1	1
19	Scientific	The course is based on dance and music theory to ensure the scientific nature of the teaching content.	1	1	1	1
20	Completeness	The course comprehensively covers all aspects of modern dance, from basics to creation.	1	1	1	1
21	Practicality	The course provides practical dance training and a creative platform to prepare students for their future career development.	1	1	0	0.67

22	Innovation	Students are encouraged to use innovative thinking and improve their personal style during dance improvisation.	1	1	1	1
23	Student Self-Development	The course helps students improve their music perception, dance skills, creativity and other abilities, and promotes their all-round development.	1	1	1	1



Focus Group Evaluation

Focus Group Evaluation Form

Expert group	agree	disagree
Expert A		
Expert B		
Expert C		
Expert D		
Expert E		

Focus Group Evaluation Summary Sheet

content	agree	disagree
Content 1		
Content 2		
Content 3		
Content 4		
Content 5		

REFERENCES



VITA

