

A Study on Enhancing Preschool Education Students' Musical Rhythm Expression Ability Based on Orff Music Education Theory

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Abstract: The development of rhythmic performance skills in preschool education students is critically important, as it directly affects the future quality of children's music education. This study aims to enhance the rhythmic performance abilities of students majoring in preschool education, based on Orff's music education theory. Orff's approach integrates music, movement, and language, emphasizing improvisation and elementary musical concepts, offering a unique and effective strategy for improving rhythm expression among students in early childhood education. Through literary research and synthesis, the theoretical and educational implications of Orff's music pedagogy are explained, summarized, and analyzed. Using the musical piece "Spring Dawn" as a case study, the research explores innovative teaching methods, practical applications, and targeted strategies for analyzing and improving rhythmic performance abilities in preschool education. The study provides both theoretical foundations and practical guidance for nurturing professional competencies aligned with the musical education needs of young children in the new era.

Keywords: Orff Music Education Theory, Preschool Education Students, Rhythmic Expression Ability.

1. Theories and Concepts of Musical Rhythm

1.1. Theories of Musical Rhythm

Rhythm originates from the Greek word *rhythmos*, which derives from *rhein*, meaning "to flow." In its broadest sense, rhythm refers to the sequential alternation of differing elements. The concept of rhythm is widely found not only in music but also in other art forms (e.g., poetry, painting, sculpture, architecture) and in nature (e.g., biological rhythms). The idea of rhythm encompasses:

The principle of distinguishing movement over time;

The phenomenon of distinguishing sound movement by time, i.e., representing events through temporal progression;

A fundamental aspect of music theory.

1.2. Musical Rhythm

The understanding of musical rhythm has ancient origins. Plato (L. Ch. translation, 2021) believed that the ability to perceive rhythm is innate, and that a beautiful rhythm reflects humanity's pursuit of beauty. Aristotle (translation, 1996) emphasized that harmony and rhythm are among the core elements of art, forming the heart of artistic expression. The essence of musical rhythm lies in the orderly variation of note length, intensity, and timing.

Researchers have defined musical rhythm in the following ways:

"Rhythm is the driving force of music; it represents the energy of music. While rhythm can exist independently, melody typically relies on rhythmic structure." (Shaomeng, 2016)

"Rhythm regulates time in music and stems from the auditory experience of variations in note length and rhythmic tension. As an essential attribute of music, rhythm serves as the framework and skeleton for the flow of musical time. It is

a tool for perceiving and expressing musical emotion, infusing music with dynamism and emotional depth." (Aiking, 2002)

"Broadly speaking, rhythm organizes the relationships between note duration and intensity, and also encompasses the temporal structure and organization of musical works across eras." (Press, 2020)

"Rhythm can be understood as uneven, phased changes occurring across multi-dimensional spaces such as time, depth, width, and height." (Yixuan, 2022)

From these definitions, we can conclude that musical rhythm is:

A core element of music;

A structural tool for organizing the timing of notes and sounds;

A means of combining loud and soft, long and short notes;

A method through which people physically and emotionally express their inner feelings.

1.3. Musical Rhythm Sensitivity

Rhythmic sensitivity refers to the ability to deeply perceive, understand, internalize, and express core rhythmic elements in music—such as beats, duration, dynamics, and accents. This ability goes beyond auditory recognition of rhythm and includes the accurate physical expression of rhythmic patterns through movement or playing musical instruments.

Scholars have defined rhythmic sensitivity in the following ways:

According to Teplov, rhythmic sensitivity involves the active perception of music, enabling individuals to accurately grasp the emotional expressions embedded in the temporal progression of musical motion. It embodies two essential characteristics: movement and emotion. (S.Y. translation, 1990)

The term "rhythmic sensitivity" can be interpreted as the sensory and cognitive experiences evoked by movement

patterns that periodically conform to certain artistic laws or objective phenomena. It represents a psychological response to specific rhythmic stimuli in the human brain, perceived through sensory organs, and contributes to the formation of cognitive, emotional, and aesthetic experiences related to rhythm. This includes an understanding of rhythm's intensity, length, speed, repetition, and other structural components.

New Zealand musicologist Ian Cross emphasizes the strong connections among music, cognition, culture, and evolution. He suggests that humans' sense and perception of rhythm are developed over a long evolutionary period and are closely linked to both cognitive and cultural foundations. For example, rhythmic styles vary across different cultural groups, expressing distinct characteristics and uniqueness. (Cross, 2008)

Rhythmic sensitivity is not merely a passive acceptance of rhythm; it also entails active perception, analysis, and expression. Therefore, it is both kinesthetic and emotional in nature and serves as an indispensable component of musical art. Beyond enhancing musical expression, it also fosters aesthetic appreciation and creative thinking to a significant extent.

2. Theoretical and Methodological Foundations for Developing Rhythmic Expression Ability

The Orff approach to music education, which aims to cultivate rhythmic awareness and expression, has been analyzed in this study from the perspectives of music pedagogy, key concepts, definitions, characteristics, and educational outcomes, thereby clarifying the conceptual scope of the research.

Orff's music education philosophy represents a crucial component of modern music education. Among the three most influential global methods of music instruction, the approach developed by German composer Carl Orff stands out for its effectiveness. This philosophy emphasizes the fundamental elements of music—especially rhythm—and utilizes diverse tools such as the voice, body movement, and instruments to stimulate students' musical potential and creativity.

The Orff Music Education System.

2.1. Curriculum Content

Orff's system includes vocal, movement-based, and instrumental modeling. These content areas begin with natural body movements and extend to vocal imitation and the use of percussion instruments as the primary tools, allowing students to physically feel and express rhythm through the interaction between body and music.

Vocal modeling focuses on combining speech and rhythm, helping students internalize rhythm through speaking and singing.

Movement modeling enables students to express music through body motion and dance.

Instrumental modeling uses percussion instruments such as drums and tambourines to express rhythmic patterns.

2.2. Teaching Format

The Orff method emphasizes collaborative and integrative learning. Group learning encourages cooperation through musical ensemble activities such as choral singing and group dance, aiming to enhance students' understanding of rhythm

and teamwork.

Comprehensive learning integrates music, dance, drama, and language, offering students rich and diverse musical experiences. Through multisensory interaction, it supports holistic development of music literacy. For example, in rhythm training, combining body movement with verbal expression helps students not only learn rhythmic patterns but also grasp the multidimensional nature of musical expression.

2.3. Teaching Methods in Orff's Music Education

Orff's music education employs a combination of guided innovation and imitation-based teaching methods. The guided innovation approach inspires students to imitate and engage, directing them toward developing musical creativity and a keen sense of rhythm. Instructional techniques include rhythmic play, reading rhythmic patterns, bodily movement, and vocal dynamics (e.g., clapping, stomping), as well as singing with finger gestures to build rhythmic awareness. For instance, students might be asked to recite a rhythmic children's poem while accompanying it with basic percussion instruments, allowing them to experience the interplay between language, rhythm, and music.

Instructional tools that support rhythm comprehension and expression include percussion instruments, rhythm cards, and movement diagrams. Instruments like tambourines or maracas help students intuitively sense rhythm and improve their performance skills. Additionally, incorporating visual aids such as picture books, stories, or paintings into musical instruction fosters cross-sensory engagement, allowing students to better perceive rhythm and emotional nuance in music.

2.4. Core Concepts in Orff's Music Education

Elementarity: Music education begins with basic musical elements.

Improvisation: Inspired by nature and creativity, improvisation enhances skill and spontaneity.

Holistic Experience: Learners are exposed to rich, unified, and aesthetically complete experiences.

Participation: Every student in the music classroom is a performer and an active participant.

Cultural Diversity: Orff's teaching activities can incorporate traditional music from any nation or region.

In conclusion, Orff's music education—founded by German composer Carl Orff—is a central pillar of modern music pedagogy and is widely applied around the world. His approach emphasizes the use of diverse tools, such as the body, movement, and language, to facilitate musical understanding through natural, participatory learning processes. Special attention is given to rhythm development, enabling students to grasp musical fundamentals in a relaxed and enjoyable environment through games and physical rhythm.

For undergraduate students majoring in preschool education, mastering Orff's methods not only enhances their own rhythmic sensitivity but also cultivates the flexibility to apply a variety of teaching techniques. In practice, Orff instructors often involve students in rhythmic activities such as the "Rhythm Solitaire" game, collaborative percussion performances, rhythm-based improvisation, and canon singing. These exercises help students intuitively understand the function of rhythm in music. Through repetition and



Figure 2. Rhythm 1



Figure 3. Rhythm 2

The melodic structure of Spring Dawn aligns with the characteristics of the seven-tone Gong mode. The melody is primarily composed of stepwise motion and small intervals, with occasional larger leaps. Overall, it maintains a smooth and stable flow. This progression and the small leaps follow the traditional aesthetic of Chinese folk music and adhere to

the natural, harmonious principles of the Gong modal system. The melodic contour makes the song easy to sing and effectively conveys the freshness and beauty of spring to listeners.

Vocal range: g to a¹.

Lyrics:

The first line sets the scene, describing the sweetness of spring sleep and the poet's affection for the morning sunlight.

The second line paints a picture of pleasant spring sounds, while also explaining the reason for awakening.

The third line turns reflective, expressing a sense of nostalgia.

The final line returns to the present moment and is translated from Shi Chun to Shi Chun, emphasizing continuity and cyclical beauty.

The language of the entire poem is simple and natural. Though the wording is plain, the meaning is profound. It captures an authentic and emotional view of nature, imbued with genuine appreciation for its beauty.

Spring night passes quietly; unaware of dawn,

I awaken to birds singing all around.

Recalling last night's wind and rain,

I wonder how many blossoms have fallen.



Figure 4. Сэтгэл хөдлөл: Дууны үг, ая нь хаврын урин цагийг хайрлах, магтаал сайшаал

The song expresses generosity of spirit and a sense of melancholy over the passing of time. Its form and style reflect the innocent joy of a child, while the musical atmosphere is relatively simple and pure, creating a calming and peaceful soundscape. This allows students to momentarily forget their inner worries and become immersed in a joyful musical world. The act of expressing gratitude through song captures feelings of innocence, happiness, and carefree delight.

3.2. Classroom Instruction

Building on their existing knowledge and skills, students engage with the theoretical and practical aspects of the piece Spring Dawn. They preview the concepts in advance and return to class prepared to read and sing based on rhythmic patterns. The instructor conducts the lesson, evaluates the results of online learning and assignments, explains key and

difficult learning points, and guides students in improving their practical musical abilities.

3.3. Practical Activities

3.3.1. Individual Activities:

Flexible recitation and singing serve as the foundation for various expressive tasks including body movements, fingerplay, vocal dynamics, and percussion performance.

Rhythmic Reading:

Based on the emotional tone and lyrical meaning of the piece, students construct and recite rhythmic patterns for the lyrics using steady, well-structured rhythms.

Example: “Spring Dawn”

(The detailed classroom application of this song continues...)



Figure 5. Rhythm of Spring Dawn

Performance of Spring Dawn

Lyrics excerpt:

Unaware of dawn, spring sleeps on—

Birdsong rings out everywhere.

Remembering last night’s wind and rain,

How many blossoms have fallen?

3.3.2. Body Rhythm Activities

Creative Movement Section:

The teacher plays Spring Dawn while students use online resources and prior instruction to freely choreograph movements that reflect the lyrics and emotions of the song.

Students are encouraged to use their imagination and try diverse expressive actions.

Teachers guide students during the creative process, stimulating expressive thinking.

Teachers and students collaboratively choose the most fitting gestures for performance.

Actions are summarized and standardized for consistency and collective practice.

Examples of Body Gestures:

“Spring sleeping soundly”: Place hands on cheeks and tilt head, mimicking sleep.

“Birdsong everywhere”: Spread arms like wings, sway side to side to show liveliness and listening.

“Wind and rain in the night”: Raise arms and sway them like branches in the breeze.

“How many blossoms fell?”: Slowly lower arms with relaxed fingers to mimic petals falling.

During expressive reading, piano accompaniment supports students’ movement, and the rhythm of movements must remain steady and coordinated. Singing is paired with motion exercises to enhance full-body engagement.

Full Rhythmic Exercise:

Students perform Spring Dawn following the music, focusing on rhythmic precision, timing, and movement coordination. Teachers guide students to pay attention to pauses, dynamics, flow, and overall completeness.

3.3.3. Instrumental Activities

Based on the lyrics and emotional tone, appropriate percussion instruments are chosen.

Instruments such as wood blocks, maracas, bells, dance pads, and drums are introduced with their tone qualities and playing

techniques.

Teachers demonstrate rhythm patterns using percussion, allowing students to experience various rhythmic sensations.

Example Rhythmic Design:

“Spring sleeps through dawn”: wood blocks (ta ta ta ta | ta a a a)

“Birdsong rings out everywhere”: sand blocks (| ta ta ta ta | ...)

Group Practice:

Students are divided into groups, each selecting an instrument. Each group rehearses Spring Dawn based on assigned rhythm patterns. Teachers check for errors and provide feedback.

Ensemble Showcase:

Groups perform one by one while peers observe.

Evaluation includes:

Teacher assessment

Peer feedback

Joint evaluation of rhythm accuracy, instrument coordination, and expressiveness.

3.3.4. Fingerplay Activities

Creative Movement Section:

The teacher plays Spring Dawn, and students creatively choreograph finger gestures based on the lyrics and emotions, using previously learned content and explanations.

Students are encouraged to be imaginative and brave in exploring different gestures.

Teachers guide and inspire students throughout the activity.

The teacher and students collectively select and refine the most suitable movements.

Fingerplay Examples:

“Spring sleeps on”: Make fists and rest them on cheeks, mimicking sleep, then slowly open eyes to match the rhythm.

“Birdsong everywhere”: Raise index fingers beside the head like bird beaks, flutter them rhythmically.

“Wind and rain”: Rotate hands in front of the body to imitate movement.

“How many blossoms fell?”: Slowly lower hands from above like falling petals.

Teachers demonstrate and explain each fingerplay clearly to help students accumulate expressive experience.

Student Practice:

Students follow the teacher’s gestures while chanting rhythmic cues (e.g., “one-two-three-four”).

Students practice the fingerplay in sync with an audio recording of Spring Dawn, repeating for fluency.

Teachers monitor, guide, and correct as needed.

Fingerplay Game (10 minutes):

Students are grouped for a competition. Each group performs their version of Spring Dawn while others observe.

Evaluation criteria include rhythmic accuracy, gesture precision, and expressiveness, judged jointly by the teacher and students.

3.3.5. Moment-Based Activities (Combining Sound with Body Movement)

Movement is chosen based on the rhythm, pulse, emotion, and meaning of the lyrics. These movements are paired with vocal recitation to enhance students’ rhythmic sensitivity and expressive performance.

Teaching Process

Students consolidate their understanding of singing and vocal dynamics:

The teacher plays and sings Spring Dawn on the piano, guiding students to follow along. Students are then asked about their perceptions and emotional impressions of this classical poem.

To deepen their comprehension of pulse and expression, the teacher reintroduces the concept of musical impulse and its forms.

Movement and Activity Model

Creative Movement Task:

The teacher plays Spring Dawn, and students, using online resources and prior instruction, choreograph appropriate expressive movements that align with the song’s lyrics and emotions.

Students are encouraged to be imaginative, bold, and experimental in their gestures.

Teachers support and guide the creative process, encouraging expressive thinking.

Teachers and students collaboratively select the most suitable movements.

The group reflects, summarizes, and unifies the gestures

based on collective consensus.

Examples of Rhythmic Movement Patterns:

“Spring sleeps on through the dawn”: Soft clapping (ta ta ta ta) to convey the peacefulness of spring slumber.

“Birdsong everywhere”: Faster clapping (ta ta ta ta) to reflect the urgency and liveliness of chirping birds.

To imitate the sharp cries of birds, fingers may flick (ta ta ta ta).

“The sound of wind and rain at night”: Gentle foot stomping (ta a ta a) to express intensity.

Rubbing palms (ta ta ta ta) imitates the sound of wind and rain.

“How many blossoms have fallen?”: Slow, soft tapping on thighs (ta a ta a), expressing sorrow over fallen petals.

Practical Lesson

As students perform movements alongside recitation, the teacher guides the choreography and gradually increases tempo with repeated practice.

While students sing or vocalize, the teacher plays Spring Dawn and emphasizes coordination between movement and music. Corrections are provided to refine rhythm and motion alignment.

Expansion and Performance

Students who successfully integrate rhythm and artistic understanding are encouraged to combine gestures with vocal performance and develop original interpretations.

Selected students are invited to perform their interpretations of Spring Dawn on stage.

The song serves as a practical model for musical analysis—covering elements such as title, tone and melody, rhythm, meter, tempo, dynamics, harmony, and structure. Students are guided to understand and express the fusion of rhythm and meter, as well as apply these insights to vocalization and interpretation.

To enhance rhythmic performance skills in preschool education students, musical compositions can be expressed through body movement, fingerplay, instrumental performance, and sound-enhanced motion. These various rhythmic expression methods can be used independently or integrated for a multi-modal rhythm experience.

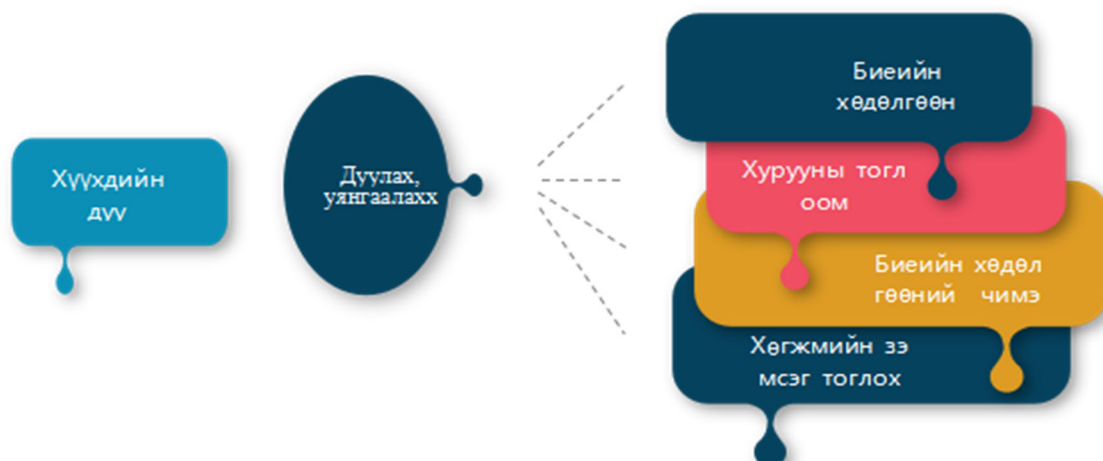


Figure 6. Moment-Based Activities

4. Conclusion

This study is grounded in the theoretical framework of Orff's music education philosophy and focuses on cultivating rhythmic sensitivity in undergraduate students majoring in preschool education. By dissecting the core concepts of "rhythm" and "musical rhythm sensitivity" and integrating them with Orff's notion of "elementary music education," a three-dimensional model of rhythmic induction—comprising physiological perception, psychological cognition, and creative expression—is proposed.

The lesson practice based on the musical piece *Spring Dawn* demonstrates that the simple, integrated, holistic, and improvisational teaching model of Orff's approach effectively fosters rhythmic awareness.

On a practical level, various activities are employed:

Singing and recitation establish a linguistic foundation for rhythm.

Body rhythm and intuition are activated through physical movement.

Fine motor coordination and rhythm regulation are developed via fingerplay.

Vocal dynamics enhance collaborative performance.

Instrumental activities help students build independent rhythmic understanding.

This advanced model—centered on "sensory connection – embodied presence – symbolic transformation"—validates

the scientific essence of Orff's principle of integrating music, movement, and language. It also provides a repeatable practical paradigm for reforming preschool music education, introducing innovative methods of expression, instruction, and multimodal rhythmic imitation into the curriculum.

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