

The Cultivation Mechanism of Creativity and Critical Thinking of Teenagers in Music Education

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Abstract: Music education plays an important role in the cultivation of creativity and critical thinking of teenagers. Through music creation, improvisation, body movement, emotional experience and other forms, music education provides rich opportunities for teenagers to practice, stimulate their imagination and innovative consciousness. At the same time, music education emphasizes emotional experience and reflection, prompting teenagers to learn to examine problems from different angles and cultivate critical thinking ability in music activities. In addition, the integration of music with other disciplines further broadens teenagers' horizons and helps them establish interdisciplinary thinking patterns. This paper probes into the mechanism of music education for the cultivation of creativity and critical thinking of teenagers, and analyzes its specific practice in the aspects of personalized development, interdisciplinary integration and emotional and thinking integration, which provides theoretical support for the promotion and optimization of music education.

Keywords: Music Education, Creativity, Critical Thinking, Training Mechanism, Teenagers.

1. Introduction

Creativity and critical thinking are seen as important skills for teenagers' future development. As a unique way of education, music education can not only improve teenagers' music literacy, but also play an important role in the cultivation of creativity and critical thinking. Through diversified teaching methods, such as Orff, Kodaly and Dalcroz, music education provides rich practical opportunities for teenagers to stimulate their imagination and innovative consciousness (Cui, 2024). At the same time, music education emphasizes emotional experience and reflection, prompting teenagers to learn to examine problems from different angles and cultivate critical thinking ability in music activities. In addition, the integration of music with other disciplines further broadens teenagers' horizons and helps them establish interdisciplinary thinking patterns. This paper will explore the cultivation mechanism of music education for teenagers' creativity and critical thinking, and analyze its specific practice in personalized development, interdisciplinary integration and emotional and thinking integration, so as to provide theoretical support for the promotion and optimization of music education.

2. The Cultivation Mechanism of Music Education for Teenagers' Creativity

2.1. Stimulate the Creative Consciousness of Teenagers

Music education plays an important role in stimulating the creative consciousness of middle and teenagers. By being exposed to different types of music compositions and styles, middle and teenagers can broaden their horizons and gain a deeper understanding of the diversity and innovation of music. For example, the Orff music education method emphasizes the free combination of musical elements and encourages teenagers to improvise, which greatly stimulates the creative desire of middle and teenagers. In this atmosphere, teenagers

are no longer satisfied with imitation and copying, but begin to try to express music in their own way, and this process of expression is itself an awakening of creative consciousness. In addition, the role playing and situation simulation in music activities also allow middle and teenagers to give play to their imagination in simulated real or fictional situations, further strengthening their creative consciousness. Just as Einstein said: "imagination is more important than knowledge", music education is to stimulate the imagination of middle and teenagers to cultivate their creative consciousness.

2.2. Cultivate Creative Thinking of Teenagers

Music education has a unique advantage in cultivating teenagers' creative thinking. Music creation requires inspiration and intuition, but it is also supported by logical thinking and problem solving. In the process of music education, teenagers need to understand the structure of music, analyze melody and harmony, and these activities exercise their logical thinking and critical thinking. At the same time, improvisation and creative ideas in music creation have fostered divergent thinking and innovative ability of teenagers. For example, Kodaly music education focuses on the emotional experience of singing and music, and inspires teenagers to create by guiding them to deeply understand and feel musical works (Zou, 2025). Under this guidance, teenagers learn to examine music from different angles, integrate their personal emotions into the creation, and form a unique musical style. The cultivation of creative thinking not only helps teenagers develop in the field of music, but also can be transferred to other aspects of study and life, and become a powerful weapon for them to solve problems.

2.3. Enhance Creative Skills of Teenagers

Music education plays a key role in enhancing the creative skills of teenagers. Music creation needs to master certain skills and techniques, such as melody creation, harmony arrangement, instrument playing and so on. Through music education, teenagers are able to systematically learn and master these skills, providing a solid foundation for their creative activities. For example, the Dalcroz method of music

education emphasizes body movement and improvisation, and through the interaction of the body and music, teenagers can develop unique creative skills in free musical activities. In addition, music education also focuses on the development of teamwork and communication skills, which are equally important in the creative process. In group musical activities such as band or choir, teenagers need to learn to collaborate with others to complete musical works. This collaborative process not only exercises their teamwork ability, but also promotes the improvement of creative skills. Through music education, teenagers can gradually grow into well-rounded talents with creativity and practical ability.

3. The Training Mechanism of Music Education for Teenagers' Critical Thinking

3.1. Cultivate Critical Review Ability

Music education has a unique advantage in cultivating teenagers' ability of critical examination. By learning and appreciating different types of music works, teenagers need to analyze and evaluate the structure, style, emotional expression and other aspects of music, which exercises their critical thinking (Costes-Onishi & Kwek, 2023). For example, in classical music teaching, teachers will guide teenagers to analyze the works of Beethoven, Mozart and other masters, and explore their creative background, musical characteristics and historical influence. This cross-disciplinary approach helps develop critical examination skills, as teenagers not only understand musical works themselves, but also examine them in their broader historical and cultural contexts. In addition, the improvisation and adaptation activities in music education also require teenagers to think critically about existing music works and put forward their own opinions and creativity, which further strengthens their critical review ability.

3.2. Develop Critical Expression Skills

Music education not only cultivates teenagers' ability of critical examination, but also exercises their ability of critical expression. In music education, teenagers need to learn to

express their musical opinions and feelings with accurate and clear language. For example, in a music appreciation class, teenagers are required to comment on the music they listen to, analyze its strengths and weaknesses, and make their own suggestions for improvement. This process requires that they not only have the ability to critically examine, but also be able to communicate their ideas clearly to others in the right language. In addition, group discussions and debates in music education also provide a platform for practicing critical expression skills. In these activities, teenagers need to learn to listen to others' points of view, put forward their own counter-opinions, and constantly improve their expression in communication. Through these activities in music education, teenagers' critical expression ability has been effectively exercised and improved.

3.3. Improve Critical Self-Assessment Ability

Music education also plays an important role in developing teenagers' critical self-evaluation skills. In the process of learning and creating music, teenagers need to constantly reflect on their own performance and evaluate whether their work has achieved the expected effect, and this reflection and evaluation process helps to develop their critical self-evaluation skills (Pogonowski et al. 2023). Teenagers need to monitor, analyse and improve their playing or singing in music practice. This requires critical scrutiny, the ability to look objectively at performances and to admit and correct mistakes. Presentations and competitions also provide opportunities to practise these skills. These activities help teenagers learn from others' feedback, improve their work and performances, and develop critical self-evaluation skills.

4. Practical Methods of Music Education in the Cultivation of Creativity and Critical Thinking of Teenagers

4.1. Orff Music Education Method

Orff's method of music education stimulates teenagers' creativity and imagination through the free combination of rhythm, melody, harmony and other musical elements.

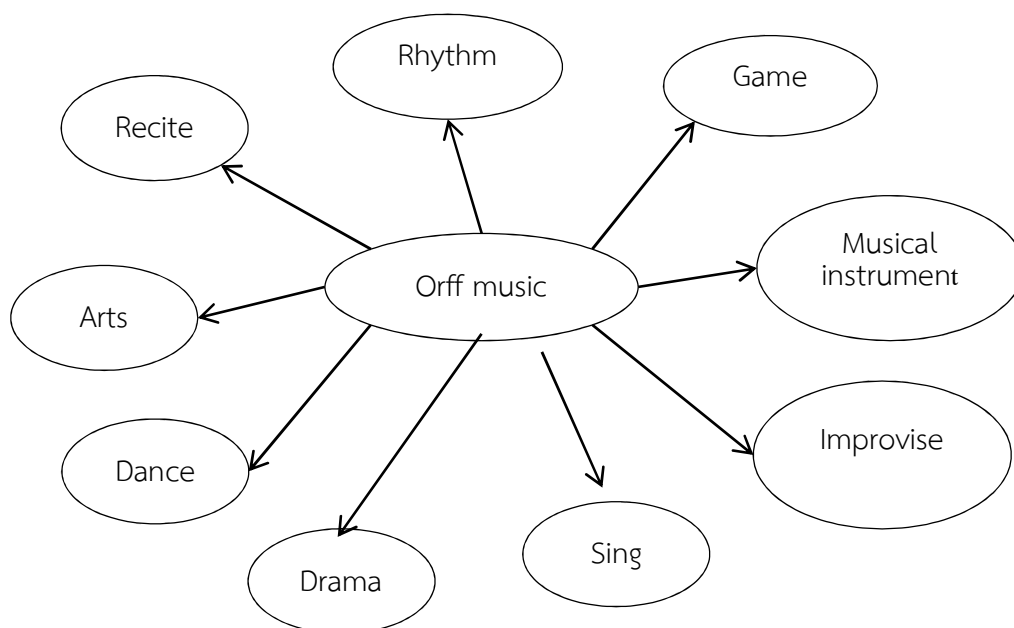


Figure 1. Main Contents of Orff's Music Education Law

(1) Free exploration of musical elements

Orff's approach to music education emphasizes starting with core elements such as rhythm, melody and harmony, and guides teenagers to combine these elements freely, thus stimulating creativity and imagination (Vasil & Dockan, 2023). For example, in the classroom, teachers can first ask teenagers to extract the "rhythm cornerstone" by reading aloud, and then use simple Musical Instruments or body movements to represent the rhythm. In actual teaching, teenagers can freely combine different rhythm patterns to create a unique rhythm pattern, and even use words and limbs to interpret the rhythm. In this way, teenagers can not only master the musical elements, but also cultivate creativity in free exploration.

(2) The practice of creative activities

Orff's method of music education includes a wealth of creative activities, such as musical composition and improvisation accompaniment. These activities promote innovative thinking and problem-solving skills among teenagers. For example, teachers can guide teenagers to imitate the sound of frogs on autumn nights with a frog-singing tube, and depict the spring drizzle with a wrist bell. Through these vivid practices, teenagers can learn to express their emotions with music. In these activities, teachers play

the role of facilitators, observers and supporters, who help teenagers overcome difficulties and stimulate their creativity through questions, encouragement and timely guidance.

(3) The Cultivation of critical thinking

The Orff method of music education also focuses on developing critical thinking in adolescents through reflection, evaluation, and discussion in the process of music creation. During the creative process, teenagers need to reflect on their own work and think about how to improve the structure, melody or rhythm of the music. At the same time, teachers can organize teenagers to evaluate and discuss each other's works, so that teenagers can learn to examine problems from different angles and put forward constructive opinions. For example, in class, teenagers can create musical skits in groups and then show and evaluate each other. In this way, teenagers can not only learn to appreciate the advantages of others, but also make suggestions for improvement, thus improving their critical thinking skills.

4.2. Kodaly Music Education Method

Kodaly music education focuses on the emotional experience of singing and music, and cultivates teenagers' ability of music perception and expression.

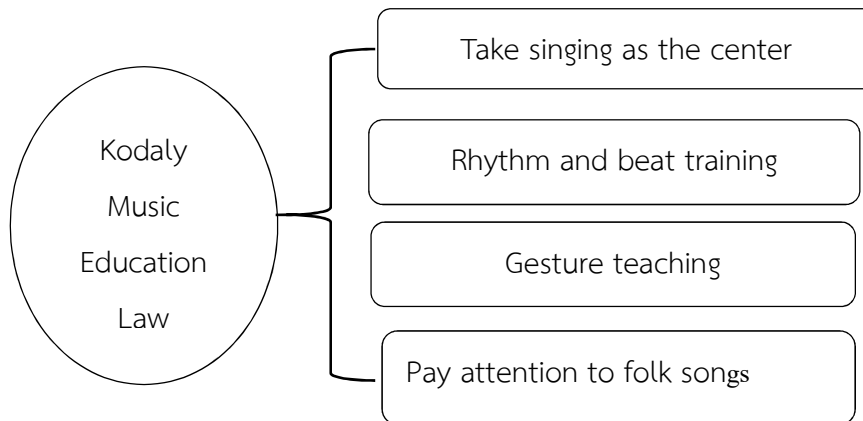


Figure 2. The Core Idea of Kodály's Music Education Law

(1) Integration of singing and emotional experience

The Kodály method of music education focuses on the human voice as the starting point of contact with music, and think that singing is the most natural musical instrument of human beings. In teaching, teenagers' music perception ability and emotional expression ability are cultivated through various forms such as chorus and solo singing (Hu, 2022). In the classroom, teachers organize teenagers to appreciate different styles of music, such as Hungarian folk music and classical masterpieces, to help teenagers understand the diversity and complexity of music. At the same time, the teachers guide the teenagers to ask questions and reflect through questioning and discussion. In this way, they cultivate their critical thinking.

(2) Critical listening and appreciation

The Kodály method focuses on cultivating teenagers' critical listening skills and guiding them to make in-depth analyses of musical structure and emotional expression through activities such as appreciating classical works and comparing musical styles. In the classroom, teachers organize teenagers to appreciate different styles of music to help them

understand the diversity and complexity of music. Teachers guide teenagers to think critically. For example, when enjoying a ballad, the teacher will encourage teenagers to analyse the song's characteristics and emotions, and express their own opinions.

(3) The combination of creative expression and critical thinking

The Kodály music Education method encourages teenagers to integrate critical thinking into creative expression through activities such as singing creation and lyrics adaptation. For example, teachers can guide teenagers to make melody adaptations or lyrics to familiar folk songs to cultivate their innovative ability and musical expression. In these activities, teenagers not only need to use critical thinking to analyze and improve their work, but also need to learn to examine problems from different angles and put forward constructive opinions. For example, in creative activities, teenagers can evaluate each other's works and put forward suggestions for improvement through group discussion, so as to enhance their critical thinking skills.

4.3. Dalcroze Music Education Method

Dalcroze music education is a music education system that

cultivates teenagers' musical perception, creativity and critical thinking through the combination of body movements, improvisation and solfeggio.

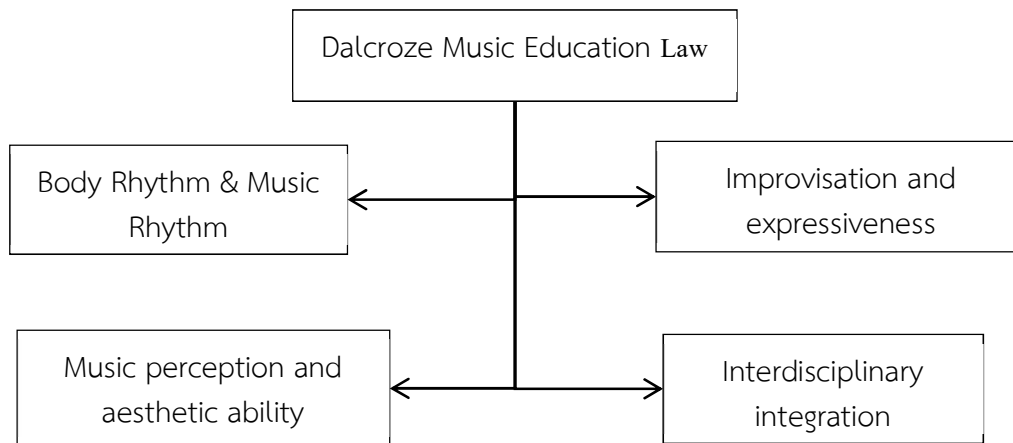


Figure 3. Main Characteristics of Dalcroze's Music Education Method

(1) Practice and application of body rhythm

One of the core aspects of Dalcroze's approach to music education is body movement, which is the experience and expression of the rhythm, melody and emotion of music through body movements (Liang, 2021). For example, teachers will guide teenagers through walking, running, jumping and other movements to feel the speed and rhythm of the music. In teaching, the body rhythm is divided into in-situ movement (such as clapping, swaying) and spatial movement (such as walking, running, jumping), which can be combined with the height, strength, speed and slow of music to help teenagers better understand the structure of music. Body rhythm not only promotes the physical coordination and spatial perception of adolescents, but also stimulates their creativity. Through the interaction between the body and music, teenagers can feel the internal logic of music more intuitively, thus creating unique forms of expression in the free rhythm.

(2) Free space for improvisation

The Dalcroze music education method emphasizes improvisation and provides free play space for teenagers. Improvisation activities include improvisational dancing, improvisational playing and improvisational singing, etc. Teenagers can freely express their feelings and ideas according to the rhythm and melody of the music. For example, the teacher will use piano improvisation to guide the youth to improvise responses with body movements or instruments. In improvisation, the teacher's role is to encourage teenagers to be adventurous and innovative. In this way, teenagers are not only able to develop creativity and imagination, but also to find a personalized style in musical expression.

(3) The embodiment of critical thinking in improvisation

The Dalcroze's method focuses on developing critical thinking in teenagers, particularly in the process of improvisation. Teenagers reflect on their own improvisation, analyzing the effect of musical expression and accuracy of emotional communication. At the same time, teachers organize teenagers to share their work and receive feedback from their peers. Discussion and suggestions help them look at problems from different angles and improve their work.

This helps teenagers not only perform music but also solve musical problems. The Dalcroze method combines creativity with critical thinking, providing a solid foundation for developing musical literacy and skills.

5. The Inspiration of Music Education in the Cultivation of Creativity and Critical Thinking of Teenagers

5.1. Cultivation of Personalized Creativity

Music education emphasizes the importance of individual development in the cultivation of teenagers' creativity. By encouraging teenagers to make music according to their own interests and styles, music education provides a space for each young person to express themselves and explore unique ways of thinking. The Orff method of music education combines rhythm, melody and harmony to stimulate imagination. Kodaly's approach involves creating songs and adapting lyrics to express inner feelings. This personalized training helps teens to be creative and think flexibly in the future. Teachers should pay attention to each young person's character, provide a variety of creative tools and forms of expression, and encourage personal expression through creative training. Personalized creative training can enhance self-confidence and lay a solid foundation for future development.

5.2. Integration of Music and Other Disciplines

Music education and interdisciplinary integration are important ways to cultivate teenagers' comprehensive ability. The relationship between music and mathematics is reflected in the regularity of rhythm and beat, the relationship between music and physics is reflected in the transmission of sound and the production of timbre, and the relationship between music and literature is reflected in the creation of lyrics and the expression of musical stories. Through the interdisciplinary teaching model, teenagers can better understand the links between different disciplines, improve comprehensive literacy and interdisciplinary problem-solving ability. For example, in the combination of music and mathematics, teenagers can create music by analyzing the

mathematical laws of rhythm; In the combination of music and literature, teenagers can express emotions and stories by creating lyrics. This interdisciplinary integration not only broadens teenagers' knowledge, but also cultivates their ability to think from multiple perspectives.

5.3. Integration of Emotional Experience and Critical Thinking

Music education focuses on skills and emotional experience. Through activities such as singing, listening and appreciation, teenagers can understand the emotional connotation of musical works and develop skills in sensitive emotional perception and expression. It also provides a unique opportunity to cultivate critical thinking. Teachers should encourage teenagers to participate in discussions, share their feelings and learn to listen. For example, in music appreciation activities, teenagers can express their opinions by comparing musical works and analyzing their emotional expression and musical structure. This blend of emotional experience and critical thinking helps teenagers develop empathy and learn to make independent judgement. Teenagers can understand music better and improve their critical thinking skills through reflection and discussion.

6. Conclusion

Music education has far-reaching significance and an irreplaceable role in the cultivation of creativity and critical thinking in teenagers. Practicing Orff, Kodaly, Dalcroz and other music education methods, we can see that music education offers teenagers rich practice opportunities and varied learning paths. These methods not only stimulate teenagers' imagination and innovative consciousness, but also help them explore themselves and express their personalities through emotional experience, improvisation, body rhythm and other activities, forming unique thinking and creativity.

Music education also focuses on combining emotional experience with critical thinking, so that students can examine problems from various angles in musical activities and develop empathy and independent thinking skills. Moreover, integrating music with other disciplines further broadens teenagers' horizons and helps them develop comprehensive and interdisciplinary problem-solving skills. In the future, educators should further optimize the practice of music education, make full use of its unique advantages in fostering creativity and critical thinking, and lay a solid foundation for the all-round development of teenagers.

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