

Application and Value of Flute in Children's Music Education

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Abstract: Flute is an ideal carrier for children's music enlightenment because of its beautiful timbre, portability and easy entry. The purpose of this study is to systematically explore its unique value and practical path in children's music education. By analyzing the adaptability of flute to children's psychology and physiology, we can construct a three-stage teaching strategy from interest enlightenment, skill formation to ability development, including game teaching and ensemble practice. Practice shows that learning flute can not only improve children's musical literacy and aesthetic ability, but also have significant multi-value in their cognitive development, non-cognitive ability, psychosomatic coordination and social emotion cultivation. This study provides theoretical basis and practical reference for scientific application of flute in children's education.

Keywords: Flute, Children Music Education, Instrumental Teaching, Application Strategy, Educational Value.

1. Introduction

With the continuous promotion of aesthetic education in the education system, how to stimulate children's interest in music and promote their all-round development through effective instrumental learning has become an important issue. Among many musical instruments, flute has attracted more and more attention due to its unique artistic charm and teaching advantages [1]. It has a wide range, clear and melodious timbre, easy to arouse children's emotional resonance; its compact shape, easy to carry, and relatively low entry threshold, especially friendly to children learning music. At present, most of the researches on children's instrumental music education in China focus on piano, violin and other traditional musical instruments, while the flute, which has universal potential, is not paid enough attention to, and its teaching practice lacks systematic strategy summary and value exploration. Therefore, based on the characteristics of children's development, this paper aims to systematically analyze the unique adaptability of flute as an educational carrier, construct a set of interesting and effective teaching application strategies from enlightenment to advancement, and deeply analyze its comprehensive value to children's growth from multiple dimensions, so as to provide new ideas and enlightenment for enriching children's music education practice and improving education effectiveness.

2. Analysis of The Adaptability of Flute as A Carrier of Children's Music Education

2.1. The Instrumental Characteristics of flute and the Psychological Fit of Children

Flute, as a carrier of music education, has a natural correspondence with children's psychological characteristics. Its crisp and bright timbre conforms to children's instinctive pursuit of beautiful sounds, which can quickly attract children's attention and stimulate their interest in learning [2]. From the perspective of cognitive development, the intuitive pronunciation principle and relatively simple mechanical

structure of flute are easy for children to understand and master, avoiding the cognitive burden that complex instruments may bring. At the same time, flute rich timbre changes and expressive force can satisfy children's curiosity and exploration desire, through the exploration of different sound areas and timbre changes, keep the freshness and continuity of learning. The research shows that 8-12 years old children are in the critical period of music perception development, flute suitable range and rich melody just fit the characteristics of children's music perception at this stage.

2.2. Analysis of the Advantages of Flute Learning

At the introductory stage, flute has significant teaching advantages. The pronunciation is relatively direct, and children can play complete scales after basic training. This kind of learning experience with rapid achievement helps to build confidence in learning. Compared with other wind instruments, flute does not need fragile accessories such as whistle, which reduces the economic cost of learning and maintenance difficulty [3]. The flute's holding posture conforms to the ergonomic principle, and children are easy to master the correct playing posture. In the aspect of music basic teaching, flute's fingering system logic is clear, C tone fingering is highly consistent with modern music education system, which is convenient for children to understand music theory concepts. In addition, flute rich teaching repertoire resources, from simple folk songs adapted to classic practice repertoire, for the gradual teaching provides a full guarantee.

2.3. Teaching Adjustments to Children's Physiological Characteristics

Flute teaching should be adjusted professionally according to children's special physiological characteristics. In the choice of instruments, it is recommended to use U-head flute or specially designed children's flute, the key pitch and tube length of these instruments are more suitable for children's hand size [4]. Breathing training should be combined with the characteristics of small children's vital capacity, design staged breathing exercises to avoid long-term continuous blowing. Fingering teaching should consider the development level of

children's finger strength and flexibility, and adopt a step-by-step training method. In the early stage, we can focus on the mastery of right finger, and then gradually add the coordination training of left finger. For children in tooth replacement period, special attention should be paid to the adjustment and adaptation of mouth shape, and a softer practice method should be adopted. At the same time, according to the characteristics of children's attention duration, it is suggested to adopt the training mode of "a small number of times" to divide the practice time reasonably to ensure the learning effect. These targeted adjustments can not only improve the quality of teaching, but also effectively prevent children from physical injuries that may occur in the process of music learning.

3. Flute in Children's Music Education in The Specific Use of Strategies

3.1. Gamification and Experiential Teaching in the Stage of Interest Enlightenment

Interest is the most primitive and effective driving force for children's learning. In the enlightenment stage, any mechanical boring technical training may kill its natural musical curiosity [5]. Therefore, the core task of this stage is not to accelerate skills, but to make children feel the charm of flute in full participation and establish positive emotional connections through carefully designed game-like and experiential activities. Specifically, teachers can abandon the traditional sitting practice and adopt the method of "body rhythm before instrument performance". For example, let children swing freely along with different styles of music, and use their footsteps to perceive the speed and strength of rhythm, thus transforming abstract musical feeling into physical experience. At the beginning of contact with the instrument, there is no need to rush to teach the complete position of holding the flute, but let the child explore how to make the flute hair sound first, and turn this into a fun competition to see who blows the longest and most stable sound. This is essentially the initial training of abdominal breathing quietly completed in the game. Spectrum recognition teaching can also be carried out in a revolutionary way, transforming the traditional staff into a graphic spectrum or color spectrum, using different color circles to represent the notes corresponding to different finger techniques, and using the undulations of lines to indicate the direction of melody, so that children can play simple melodies by "looking at colors" or "following lines", which greatly reduces the cognitive threshold and obtains instant sense of achievement. The teaching content must be closely related to children's life experience, giving priority to their familiar nursery rhymes and cartoon theme songs as practice materials. When children find that they can play familiar melodies by themselves, their inner joy and pride will become the most solid motivation for continuous learning.

3.2. Systematic and Interesting Combination of Basic Skill Formation Stage

When children have a stable interest in flute, teaching should turn to systematic training of basic skills in a timely and appropriate manner. The challenge at this stage is how to introduce the necessary technical specifications without falling into monotonous and repetitive patterns and keep learning interesting. Successful strategies involve subtly "wrapping" technical points into challenging and game-like

activities. For example, for vital breath training, a "breath track" game can be designed: placing a lightweight ball on a music stand and asking the child to blow the flute and use a smooth airflow to push the ball along a preset trajectory (such as a line or curve). This not only visualizes abstract long-tone exercises, but also introduces clear goals and immediate feedback. Finger exercises can be upgraded to "rhythm password", teachers tap a set of rhythm patterns, students need to crack the password as quickly and accurately with finger responses, which at the same time exercise their sense of rhythm, reaction speed and finger independence. At this stage, teachers should attach great importance to the setting and achievement feedback mechanism of "micro-goals", decompose an etude into several technical fragments, give timely and specific praise to each fragment, so that children can clearly see their progress, so as to continuously obtain a sense of achievement and control in the process of mastering systematic contents such as tone, scale and simple etude, forming a virtuous circle of "challenge-success-motivation-challenge again".

3.3. Duet and Expression Training in the Stage of Musical Ability Development

When students have a certain ability to play independently, the focus of teaching should be shifted from the improvement of personal skills to the comprehensive cultivation of musical expression, collaboration and creativity. This stage is the critical leap that leads students from "craftsman" to "little musician." Duet training is the central path to achieving this goal. From the simplest two-part canon (round play), let the students experience the wonderful sound effect brought by the interweaving of parts, and initially establish the consciousness of "listening to others". Then, gradually transition to a harmonious duet, trio. In ensemble rehearsal, teachers should guide students to pay attention to the balance, dialogue and echo between voice parts, learn to adjust their own volume and playing method for the sake of overall harmony, which is not only the tempering of musical skills, but also the socialized learning of teamwork, empathy and responsibility. In the cultivation of expressiveness, we should guide students to transcend the notes themselves and explore the emotional connotation of music. Through the way of "music painting", students can draw a picture of their hearts for a piece of music, or create a short story for a piece of music, and then discuss how to use the changes of strength, speed and timbre to express these emotions and images. It is very important to hold small music salon or achievement exhibition regularly, which provides students with a stage to present their learning achievements artistically, and is the ultimate practice to exercise their psychological quality, stage style and comprehensive artistic expression. At the same time, students who have the ability to learn can be encouraged to try simple improvisation or simple harmony for melody configuration, which will truly transform flute into a tool for self-expression, and finally realize the expansion of personality and creativity of music education.

4. Analysis of The Multiple Value of Flute Learning to Children's Development

4.1. Core values of Musical Literacy and Aesthetic Ability

Flute learning is an effective way to systematically cultivate music literacy. At the skill level, children can accurately master the basic elements of music such as pitch, rhythm and intensity through long-term practice, and develop keen auditory discrimination ability. It is worth noting that this musical ability development has significant transfer effect-research shows that children who have been systematically trained with instrumental music show significant advantages in language learning, especially in speech recognition and intonation perception. In aesthetic ability, flute rich music literature for children opened a broad aesthetic vision. From the strict counterpoint of Baroque period to the balanced form of classical period, from the emotional expression of Romanticism to the color exploration of modern times, children gradually establish a pluralistic aesthetic reference system in the process of contacting works of different periods and styles. More importantly, the clear and transparent timbre of flute is especially helpful to cultivate children's sensitivity to the beauty of sound quality, which will deepen their artistic perception.

4.2. Cognitive and Non-cognitive Abilities

From the perspective of cognitive science, flute playing is an extremely complex cognitive activity, which requires the precise coordination of sensory system, motor system and advanced cognitive function. Reading involves visual perception, symbol decoding, and working memory; playing requires real-time monitoring of auditory feedback and adjustment of motor output; and musical performance involves emotional understanding and creative thinking. This multitasking model significantly promotes functional integration of neural networks in children's brains, especially the coordinated development of the right brain (music, emotion) and the left brain (logic, analysis). In terms of non-cognitive abilities, flute learning provides a natural training ground for perseverance, concentration and self-regulation. In a child's growth process, learning music is a wonderful experience, and learning to play the flute is an important stage in this process. In the face of technical difficulties, children need to decompose problems, practice repeatedly, and seek breakthroughs. This process fosters a growth thinking model. Daily practice requires them to learn time management and overcome the urge for instant gratification. The value of this self-discipline will benefit all aspects of school and life. It is worth noting that the principle of deliberate practice in music learning is highly consistent with the psychological mechanism of academic ability improvement, which enables children to effectively transfer metacognitive strategies acquired in music to other learning fields.

4.3. Psychosomatic Coordination and the Development of Social Emotions

Playing the flute is a classic mind body pursuit which has distinct advantages for children's motor skills and psychological development. Physiologically playing the flute requires children to maintain correct posture which encourages body relaxation and proper alignment; the

diaphragmatic breathing characteristic of the flute increases lung capacity and circulation; and the finger patterns develop the small muscle groups involved and improve bilateral coordination. These physical practices do not only influence the playing of music, but also positively influence a child's physical development. Psychologically and emotionally playing the flute gives children a non-musical way to express and channel their feelings. Music is a medium of emotion whereby children can express feelings in ways that may be difficult for them to articulate verbally through rhythm, melody and tone color. This is particularly useful during periods of affective development when children need assistance in identifying and managing their emotions. Socially playing the flute gives children opportunities to learn in community. By playing within a chamber group or orchestra children learn to listen to others, to blend with others and to follow direction. These shared pursuits of an artistic goal provide children with a teaching in collectivism and responsibility which cannot be achieved in a classroom setting. Children feel a sense of personal achievement when they experience applause and positive feedback from their co-players and this in turn enhances their self-concept and social skill. The social relationships formed through shared creative pursuits help children to understand prosocial behavior in a way which is far more effective than the exercise of competition and help them to develop a lifelong ability to work cooperatively.

5. Conclusion

The flute plays a plural role in children's musical awakening and development when it is taught by means of pedagogy based on evidence. In addition to systematically improving youngsters' knowledge of music and sense of aesthetics, it has a great impact on the development of the children's cognition, cultivation of non-cognitive skills, body and mind coordination, and social maturity. In the future, more attention should be paid to the role of flute in aesthetic education because it is open to beginners and has great expressive potential. By constantly improving the teaching methods, we can fully use its unique role to educate and refine sensibilities, and thus create more opportunities for developing children's all-around growth. This requires teachers to continue investigating and adopting new teaching methods so that learning to play an instrument would become a true driving force for children's inner enrichment and spiritual progress. It also requires the backing of the staff, the curriculum to be adjusted, the family's participation, and regular assessment. For children who meet the physical requirements and demonstrate musical sensitivity, the flute is an excellent choice for musical instrument enlightenment.

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