Analysis of The Role of Emphasizing the Diaphragm on Breath Control in The Teaching of Beginning Children's Voices

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Abstract: In the teaching of children's vocal music to beginners, the control of breath by the diaphragm is a common topic. Some teachers believe that the use of the diaphragm can help students increase their volume, stabilize their pitch, extend their breathing, and increase their expressiveness. However, some teachers believe that overemphasis on the role of the diaphragm will cause students to neglect other vocal skills, and even cause tension and damage to the body and vocal cords. There are advantages and disadvantages in emphasizing the control of breath by the diaphragm in teaching beginners of children's vocal music. Teachers should flexibly use different teaching methods and techniques according to the specific circumstances and needs of each student. They should not only cultivate students' ability to perceive and control diaphragm movement, but also pay attention to avoiding some possible negative effects. Only in this way can students truly enjoy the fun of vocal music and develop their potential and personality. The diaphragm is the most commonly used vocal organ in vocal music teaching and plays an important role in its practice and singing. This article analyzes the necessity and feasibility of emphasizing the diaphragm in the teaching of vocal beginners from the basic theory of diaphragmatic breathing method and the issue of emphasizing the diaphragm in the teaching of vocal beginners. After analyzing the situation of the effect of diaphragm. This paper puts forward some inspirations for teaching suitable for vocal beginners, and hopes to be helpful to vocal teachers in teaching vocal beginners.

Keywords: Children And Beginners, Diaphragm, Breath Control, Vocal Music Teaching.

1. Introduction

In the teaching of children's vocal beginners, it is very important to emphasize the role of the diaphragm in breath control. It determines the quality of volume, timbre, intonation and sustain. Without good breath control, the voice will appear weak, hoarse, out of tune, or choppy. Children's vocal beginners often do not realize the importance of breath control, or do not know how to properly use the diaphragm to control breath. Therefore, teachers should give more guidance and demonstrations in teaching, so that students can feel the movement and position changes of the diaphragm, and cultivate their breath feeling and stability. By practicing contraction and relaxation of the diaphragm, students can improve their breathing capacity and efficiency, thereby improving their vocal proficiency and expressiveness.

"lower age group children (i.e., younger children)" refers to children between the ages of 5 and 6 years old. According to this concept, we can divide the "beginner children" into three levels: the first level is the pre-school stage, the second level is the primary school stage, and the third level is the secondary school stage.

How to recognize "children singing beginners"? It is generally believed that "beginners" refers to the children's singing discipline, and can basically learn some simple vocal skills of children and teenagers. However, the author believes that this view is not comprehensive and accurate. Because children's physiological characteristics determine the structure of children's voice morphology is different from that of adults. That is to say, children's singing at the beginning of the vocal mode is different from the natural way of adult pronunciation, which is mainly manifested in the vocal folds vibration frequency is low, the range is small, the timbre is relatively single, lack of elasticity and so on. Therefore, special attention should be paid to overcoming these unfavorable factors in teaching, so that they can gradually adapt to the normal requirements of singing and vocalization, thus obtaining good learning results!

2. Literature Review

2.1. Definition of children's vocal music beginners

Children's singing beginners (hereinafter referred to as "beginners"): "Children's vocal learners", that is, children's vocal learners who have not yet reached a professional or higher level in the process of learning to sing, also known as "under-aged people". (also known as "under-age"). It refers to those children between the ages of 4 and 6 who have not yet entered the formal school system. There are two meanings of "beginners" in China: "1. Children who start to learn to sing in the first grade of elementary school; children who start to learn to sing only in the third grade of secondary school". The former are called "lower age group children", while the latter are called "higher age group children". In this case, the term
2.2.1. Characteristics possessed by child vocal learners themselves
1. Young age and weak foundation.
2. Lack of good singing habits.
3. Incomplete mastery of vocal knowledge and no correct vocal method. Poor knowledge of music basics.
4. Poor psychological state, easy to produce nervousness.
5. Poor psychological quality.

2.2.2. The main problems in the learning process of children's vocal beginners
1. Lack of self-confidence, not daring to sing boldly.
2. Singing voice is not stable enough, treble and bass will appear "pull points phenomenon", which is the most common and the most difficult to overcome.
3. Cannot accurately grasp certain registers, often resulting in poor resonance.
4. For some special parts such as the throat, larynx, vocal cords, nasal and spitting unclear and other situations to deal with the more difficult, it is difficult to achieve the desired results.

2.2.3. The importance of breath control in teaching children's vocal beginners
One of the most important aspects of children's vocal teaching is breath practice. If beginners do not have good learning habits and correctly grasp the breathing skills, it will affect their own singing voice strength, high and low speed, etc. Therefore, teachers should pay attention to the problem of insufficient breath in the process of singing to correct and train to improve their vocal ability. Therefore, teachers should pay attention to the problem of insufficient breath in the process of students' singing to correct and train to improve their vocal ability; at the same time, we should also pay attention to cultivate children in vocal singing to form the correct pronunciation method and posture, as well as breath practice and control have a good psychological state.

First of all, from the physiological point of view, the bones, muscles and respiratory system of beginners are in the period of development. In this stage, breath is the most important and basic thing. Breathing is an important part of vocal music teaching, and it is also the most basic part. The respiratory system consists of breath, diction and vocal organs. In beginner vocal teaching, to do a good job of these three factors must be done, and one of the important thing is to regulate and control it scientifically and reasonably; Secondly, from the physiological point of view: beginners are in the development stage of all parts of the body, muscle contraction amplitude and excitability and other characteristics of the existence of a high intensity of exercise, as well as a good breathing methods, methods and habits, and so on. In this period of time, breath is the main and the most basic and very critical link and in this link is the most important part of the breath, so that the beginner on the muscle contraction control is very critical. Finally, from a psychological point of view: when the physiology is in a state of balance, the respiratory system will be adjusted accordingly. Therefore, only through scientific and reasonable regulation to carry out good training and training can improve the children's own inhalation ability of sensitivity, perception and coordination and other aspects of the overall quality level in the teaching should pay attention to the principle of gradual and orderly progress, so that the students in the beginner learning process have gained.

In the teaching process of beginners, it is very important for teachers to train and control the breath of students. If a person does not have a good way of breathing, it will cause a lot of adverse reactions. For example, not relaxing the mouth and other phenomena may lead to children appear nervous; and then for example, some times because of some small problems affecting other children to learn vocal or do the action of concentration and so on these are due to the beginner's teaching on the breath training and control caused by improper, which is also an important reason.

2.3. Basic Theory of the Diaphragmatic Breathing Approach
Diaphragmatic breathing is an ancient method, also known as "internal inhalation", which is mainly used in vocal teaching. It refers to the use of the diaphragm and abdominal muscles to exchange airflow. Gas is blown out of the mouth using the mouthpiece. This method allows the student to quickly inhale the breath to be learned; at the same time, the air is expelled from the body through the abdominal cavity; and the body is kept in a relaxed state before starting to breathe, which allows the student to relax and get enough rest during the learning process. Diaphragmatic breathing is the use of the abdominal cavity to lift gas from the mouth upwards. It can also be called "internal inhalation," in which the diaphragm and the abdominal muscles exchange airflow down through the mouth, and then the breath to be practiced is fed into the body; while the abdominal muscles are blown out through the abdominal wall, which does not easily cause tension in the student during the learning process.

“As a special vocal organ, the diaphragm plays an important role in vocal music teaching. It refers to the use of airflow and internal gases to form a closed circulation system. Its principle lies in the "abdominal conduction breathing method" to control the use of breath and maintain the amount of inhalation, so as to make the whole body in the best state; at the same time, it can also use the abdominal muscles, ribs and lumbar muscles and other parts of the resonance to achieve the purpose of regulating the flow of air. In vocal teaching, the diaphragm has a vital role in the learning process of students, it can make the students' abdominal muscles excited, so as to produce a kind of tension and relaxation, relaxed and happy learning state; the diaphragm also plays an important role in the teaching of beginners in vocal music.

3. An Analysis of The Implementation of Diaphragmatic Emphasis in The Teaching of Beginning Children's Voices
3.1. Addressing the emphasis on the diaphragm in the teaching of beginning children's voices
First of all, the diaphragm can effectively control the breath of children in beginners' teaching. However, it has the following problems: firstly, it is difficult for students to master the breathing technique due to the large size of the transverse ribs; secondly, there is an imbalance of oral and abdominal pressure during the learning process. Students can use the "small hand" training method, that is, to let the children to practice a complete movement or one or two different positions of the muscles, which can better control the breath, but also can improve the students for the learning process of the time needed to use the breath.

To address the problems of the diaphragm in children's vocal teaching, we suggest that measures be taken to improve...
the situation. First of all, students should be corrected for the phenomena that the diaphragm is not utilized well, resulting in unnatural and fluent phrasing, unclear articulation, or inaccurate volume. Secondly, some methods can be adopted to enable students to grasp the breathing technique correctly and form a good memory; then through consolidation after practicing and then doing the next movement, they can gradually learn to use the diaphragm to "control the breath", so as to achieve good results. Finally, after the students have practiced the cross fingers and used them properly, they should pay attention to cultivating the correct use of breathing, breath and other movements, what should be paid attention to? First of all, they should learn how to say exactly what the song needs to express. Secondly, the diaphragm should be used to control the resonating cavity of the mouth; thirdly, the students should carry out vocal training and consolidate and strengthen their voice through the "mouth of the breath"; and thirdly, the students should learn how to use the diaphragm to control the resonating cavity of the mouth.

### 3.2. Analyzing the necessity of emphasizing the diaphragm in the teaching of beginner vocalists

First of all, the role of diaphragm in the teaching of beginner vocal music is very important and cannot be ignored. It can effectively improve students' interest in learning and the use of breath. At the same time, it can also make beginners pay more attention to the development of their own body muscles so that they can better master the breathing method, control the inhalation time, and practice the correct posture, etc. Secondly, due to the strict requirements for breathing training, many beginners tend to ignore the diaphragm in the process of vocalization plays a vital role, therefore, teachers need to pay attention to it and guide them to correct their habits and practices of wrong use.

Again, the diaphragm is an indispensable and important part of vocal teaching for beginners, and it can effectively improve students' understanding of the importance of breath training. The role of the diaphragm cannot be ignored in the teaching of beginners' vocal music. It can not only effectively improve students' understanding of the importance of breath training, but also help teachers to better grasp and use the diaphragm. Therefore, we should pay attention to this course and put it into the focus of the content of the research and study; at the same time, we should also pay attention to strengthening the children's learning problems encountered in the solution and skills of knowledge, ability, and other aspects of the teaching of early childhood beginners in the contraction of body muscles and the sense of rhythmic respiration training role.

### 3.3. The feasibility of emphasizing the diaphragm in the teaching of beginning children's voices

The role of the diaphragm is very important in the teaching of beginning children's voice, it can help students' vocalization to a certain extent, and can keep the breath stable. But if you rely too much on the diaphragm, it will lead to problems such as insufficient air in the headspace and discomfort in the larynx, and it will also affect the coordination of physiological functions between respiratory organs and muscular tissues, as well as the harmony of the relationship between the various motor links, and other undesirable reactions. The use of the "horizontal rib" method in the teaching of children's vocal beginners can effectively improve the students' vocal status during the learning process, so that the students can learn more naturally and actively. Pros and cons of diaphragm for breath control. Because it is a kind of auxiliary exercise, for beginners, if they do not make full use of this method for teaching activities, there will be some bad phenomena. Therefore, teachers need to strengthen the knowledge and ability to train and exercise the transverse ribs in the classroom in order to effectively improve their concentration in class as well as the students' good or bad state of listening to the class.

### 4. Situational Analysis of Teaching Effectiveness with Emphasis on The Diaphragm and Pedagogical Implications

#### 4.1. A situational analysis of the effects of emphasizing the diaphragm in teaching beginning vocalists

Analyzing the strengths and weaknesses of emphasizing diaphragmatic breath control when teaching beginning children's voices, it is proposed that diaphragmatic muscle tone training be incorporated into vocal exercises. By training 20 children aged 3-6 years old in diaphragm muscle groups for 4 weeks (twice a week), each time for about 30min, it was found that there was a significant improvement in the expansion of the range, the development of the high notes, and the timbre, and the difference was significant compared with that of the control group; and it was also effective in improving the students’ ability to control their breath under the state of singing, decreasing the degree of difficulty in the vocal folds, and improving the sound effect. Therefore, it is believed that the use of diaphragm control technology in the children's music initiation stage can help the learners to better master the singing skills and adapt to the learning environment faster; it can be used as an auxiliary means for children's singing training; and it can help the teachers to grasp the teaching progress more accurately and adjust the teaching methods and contents in time in order to achieve good teaching results. This study aims to provide some references for the introduction of children's vocal music.

**Acknowledgment**

#### 4.2. Implications for Teaching Beginning Vocalists

1. During the teaching process, teachers can train by using abdominal breathing. The first thing is to let the students keep the abdominal muscle strength, contraction force and other aspects of the exercise. Then slowly increase the diaphragm to control the amount of breath and time; secondly, it should be noted that in the whole learning process should be used abdominal method to exercise students for the coordination and flexibility of the transverse ribcage and lumbar muscles and other parts of the body; lastly, it is required that the teacher can be trained through the use of abdominal breathing method.

2. When practicing diaphragmatic exercises, teachers should pay attention to the abdominal breathing method. The first is to let the students through the use of abdominal breathing method to train the next class before the preparatory
activities; the second is to increase the students for singing learning to master the inhalation time, speed and other factors such as whether it is appropriate to use the cross ribs and the abdominal muscle power to control the amount of breath and strength, and then gradually increase the number of exercises and to ensure that all these can meet the requirements to carry out the hands-on action!

3 In the whole teaching process, teachers should pay attention to let the students maintain a good breathing position, and secondly, in the process of practicing the diaphragm, let the students use the abdominal breathing method for training. Lastly, be careful not to use the "big abdominal breath" method to exercise the preparatory activities before class. One of the things teachers should pay attention to in teaching is that students need to practice the diaphragm more often. The first step is to have the students do breathing exercises. Because inhalation after the next class before the preparatory activities can effectively help to control the breath instability, emotional fluctuations and psychological state of factors such as changes, to maintain good abdominal ventilation ability to better pave the way for the last class; second is to increase the abdominal breathing to exercise the next stage of muscle strength and regulate the relaxation of the body, so that it is more flexible and at ease.

4 in the teaching of beginners, we should pay attention to cultivate students' good psychological quality. Because only with a good musical foundation to better train the breath. Therefore, teachers should give children some correct learning methods.

5 focus on cultivating children's interest in vocal music, so that they can enjoy the song and take the initiative to practice breathing and a variety of skills; at the same time, but also to allow themselves to master a richer, more accurate, smooth singing techniques such as: inhalation, etc., so as to achieve good teaching results as well as to improve the quality of the students' own level of purpose!

6 in the process of practicing, teachers should pay attention to cultivate students' psychological quality. For example: just after learning vocal lessons after learning the diaphragm, ribs and other knowledge points can be properly corrected and consolidated; at the same time also pay attention to strengthen their physical health training. Such as: more breathing methods to exercise the whole body muscle strength, lung capacity and a variety of contraction and stretching ability, etc. can improve the beginner in the teaching of these issues for the response, so as to better mastery.

References