

Analysis of how to integrate voice health care into vocal music teaching

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Abstract: *In the teaching of vocal music, many learners have a good basic condition of voice, but due to the lack of attention to voice health care measures, thus causing health problems of the vocal system and even a permanent decline in the quality of the voice. The incorporation of voice care measures and concepts in vocal music teaching is of positive practical significance. This paper mainly introduces the common voice care measures, voice diseases and preventive countermeasures in vocal music teaching, so as to serve as a reference for integrating voice care in vocal music teaching.*

Keywords: *vocal teaching; voice care; disease prevention*

1. Introduction

In vocal music teaching, many learners originally have a good basic condition of voice. However, because the teacher or at least one of the students does not pay strict attention to the key points of voice health care, after a long period of study, the voice condition is damaged and needs to be treated, or even has to give up the study of vocal music. The reason for this is that some learners or voice teaching practitioners do not have enough knowledge about voice disorders and do not know how to take care of their voices throughout their voice teaching. Therefore, it is necessary for voice teachers to have enough knowledge about voice care before teaching, and to carry out step-by-step teaching and reasonable arrangement of learning progress under the premise of adequate voice care for learners, so that learners' voice conditions can be maintained for a long period of time and gradually improved, and to achieve the prevention of many kinds of voice diseases.

2. Common voice disorders in vocal teaching and their main causes

2.1. Congestion and oedema of the vocal cords

Vocal congestion and oedema is a common health problem for learners in vocal teaching and may have long-lasting adverse effects on a singer's voice. Vocal congestion is an increase in blood inflow to the tissues of the vocal folds, resulting in congestion, swelling and reddening of the vocal folds. Some common causes of vocal cord congestion include overuse of the vocal cords, overstretching the voice, throat infections, incorrect use of the voice, throat injuries, and environmental irritants. Vocal cord congestion can cause the voice to become low and rough, with a reduced range, poorer sound quality, and reduced expressiveness. Vocal oedema is a build-up of fluid in the tissues of the vocal folds, resulting in swelling and distortion of the vocal folds. Vocal cord oedema may be caused by excessive forceful vocal production, damage to the vocal cords, over-breathing, and over-drinking. Vocal cord oedema can cause the voice to lose clarity and accuracy, making it difficult to produce normal pitch and tone. Treatment for vocal cord congestion and oedema usually includes voice rest, dietary modifications, avoiding overuse of the throat, and breath control exercises. In severe cases, further treatment by a doctor may be required.^[1]

2.2. Acute and chronic laryngitis

Acute and chronic laryngitis is an acute or chronic inflammation of the mucous membranes of the larynx, which may have an impact on vocal teaching and the health of the singer's voice. Symptoms of acute laryngitis include sore throat, dryness of the larynx, coughing, and hoarseness. Chronic laryngitis symptoms may include laryngeal discomfort, increased airway secretions, and voice fatigue. Laryngoscopy of vocal learners with acute and chronic laryngitis can reveal follicles, congestion,

swelling, and rounded edges of the vocal folds. Although acute and chronic laryngitis is not difficult to treat, many vocal learners find it difficult to recover their voices even after they have been cured, so it needs to be given high priority and focused prevention.

2.3. Vocal Nodules and Polyps

Vocal polyps are a common vocal cord disorder in vocal teaching. Vocal nodules manifest as two symmetrical or staggered small protrusions in the middle of the anterior part of the vocal folds bilaterally are small, soft lumps that form on the vocal folds. Vocal polyps, on the other hand, are bulges of muscle at the edges of the vocal folds. Vocal nodules and polyps are usually caused by excessive vibration of the vocal cords, overuse of the voice, and incorrect vocal technique. The vocal cords are overworked and irritated, leading to detachment of the mucous membrane on the vocal cords and the formation of lumps. It is usually caused by learners' over-exerting their voice vocalisation, incorrect closure of the vocal folds, frequent voice overuse and throat infections. Chronic poor vocal habits and incorrect voice technique can also increase the risk of polyps. Once formed, vocal nodules or polyps do not heal on their own in most cases and need to be removed using a fibrolaryngoscope or given medication with long periods of rest.^[2]

2.4. Vocal fold movement disorder (VFMD)

Vocal fold dyskinesia is a disorder that affects the normal functioning of the vocal folds. It is an atypical respiratory disorder resulting in a neurological or functional disorder that causes the vocal folds to move abnormally during articulation or breathing. Some vocal learners experience sudden onset of dysphonia over a long period of time and have difficulty in determining the cause of the disorder and in treating it.

Dysmotility of the vocal folds may lead to abnormalities in the voice, making it sound hoarse, hoarse and slurred, or with a rumbling sound. Changes in the voice usually come on suddenly. People with vocal fold dyskinesia may feel shortness of breath, a sense of choking, or tension in the throat when breathing. This may be especially noticeable with exercise or stress. People with vocal folds dyskinesia may have their vocal folds close abnormally during articulation or breathing, causing obstruction of airflow and resulting in breathlessness or voice restriction. Some patients may experience chest tightness or a persistent cough, which is often caused by breathing problems due to vocal fold dyskinesia. Vocal fold dyskinesia symptoms usually occur in episodes and may be triggered by emotional stress, anxiety, tension, or certain triggers. Some patients may experience difficulty or discomfort when swallowing, which may be related to abnormal vocal fold movement. Vocal fold movement disorders may be associated with emotional factors, and patients may experience worsening symptoms when they are emotionally agitated or anxious. It is important to note that the symptoms of vocal fold dyskinesia may vary from individual to individual and manifest differently in different situations. Singing requires vocal folds, a process that involves the brain, nervous system, lungs and vocal system. A learner with dysphonia may feel that he or she can no longer control the vocal system, which can be caused by prolonged stress, depression or fatigue. This can be caused by prolonged stress, depression or fatigue, and often requires long periods of rest and therapy, with unpredictable effects on subsequent vocal learning.^[3]

3. Common Voice Care Tips Before Teaching Vocal Music

3.1. Throat opening exercise

In vocal teaching, open-throat exercises refer to a series of vocal exercises and techniques prior to conducting a formal teaching session, designed to help singers relax their throats, enhance resonance and improve the quality of their voices. These exercises help to extend the range of the voice, adjust resonance points, and improve vocal projection and expression, while allowing the learner to avoid tight, dry vocal systems and injuries during long periods of study and practice. Common forms of laryngeal opening exercises include exhalation exercises, laryngeal relaxation exercises, resonance adjustments, and range expansion exercises. These exercises are designed to help learners adjust their breath, relax their vocal system, find their resonance, and adapt to a wider range of pitches. These exercises are like warm-up exercises for athletes before training, and they can have a positive effect on preventing fatigue and injury to the vocal system.

To ensure the effectiveness and safety of throat opening in vocal practice, care should be taken that it is not done too quickly. Work progressively, gradually extending the range of the throat to avoid overstraining the vocal cords. Do not pull the larynx open too hard, as this may cause voice damage. Maintain proper posture during the throat opening exercise and make sure your body posture is correct, especially your neck and head. The head should be lifted slightly upwards and the neck should be relaxed without twisting or excessive tension. Correct posture helps to open the throat and provide better sound projection. Breath control is also very important and throat opening exercises need to be combined with correct breathing techniques. Use abdominal breathing to support the voice and make sure your breathing is deep, steady and consistent. This helps to reduce the stress on the vocal cords. Throat opening is not about singing loudly, but about producing a clear, steady and supported voice. Be careful not to use too much force and control your voice to ensure it is gentle and even. It is important to perform a vocal warm-up before performing open throat exercises. This helps to prepare the vocal cords, making it easier for them to adapt to the demands of the exercise and reducing the risk of voice damage. If possible, it is necessary to have a professional instructor on site. They can provide personalized advice and tips to ensure that your throat opening exercises are done correctly and safely. Learners should not over-practice the open throat technique to give their vocal cords adequate rest and avoid vocal fatigue and injury. They should also keep their throats clean and avoid unhealthy lifestyles such as smoking, overeating and excessive alcohol consumption to avoid unnecessary irritation and damage to the vocal cords^[4].

3.2. "Breathe in and out" exercise

In voice teaching, the "fast inhalation and quick exhalation" exercise is a common breathing exercise designed to help vocal learners develop deep, fast and steady breathing techniques. This exercise has a number of health benefits. It improves breath control and voice support, which helps the vocalist to achieve better sound quality and volume when performing, and it is beneficial for improving lung capacity. By inhaling and exhaling quickly and deeply, the endurance and strength of the respiratory muscles can be increased, which in turn improves lung capacity, and also improves breath control. Through the "fast inhalation and exhalation" exercise, learners need to adjust their breathing rhythm quickly and accurately, so that the breathing and singing can be coordinated together. This helps to develop flexibility and speed of response of the breathing muscles, improve breathing control and help to stimulate the respiratory system. Rapid inhalation and exhalation stimulates the respiratory system and promotes oxygen absorption and carbon dioxide elimination. "Breathing in and out quickly" also helps to maintain the health and function of the respiratory organs and enhances the overall supply of oxygen to the body. The "Breathe In, Breathe Out" exercise allows the learner to remain relaxed and at ease for long periods of time, making the vocal system less susceptible to fatigue and the accumulation of health risks.

3.3. "Doo-doo" exercise

The main purpose of the "beeping" exercise in voice teaching is to help the learner relax the lips, mouth cavity and jawbone, and to develop correct articulation and lip technique. The "beeping" exercise has some health benefits, especially for vocal and articulation skills, and is also a common technique for adjusting breathing rhythm. According to China's traditional vocal theory, "a good singer must first adjust his or her breath, and when the breath helps, the sound will come out". At this time, the learner needs to sink the breath to the diaphragm to the belt area and hold it for half a second to a second, and then exhale with a sigh and let the lips quiver naturally, the whole process of the vocal system, the face and the shoulders are to maintain a high degree of relaxation and try to blow the breath as long as possible in the repeated practice, the lips quivering to make a "toot" sound. This exercise also helps to improve the softness and flexibility of the lips, reducing unnecessary tension and resistance in the sound. It is not necessary to make the "toot" sound at a high volume. The learner's voice should be gentle and even, and not overly forceful so as not to stress the vocal cords. Tooting" is a useful vocal practice technique, but it can only be performed with the correct technique and precautions to ensure a healthy and quality voice. Following the above advice will make "beeping" more effective and safer.^[5]

4. Prevention of common voice disorders in vocal teaching

4.1. Apply the correct vocal method

Following the correct vocal method has several health benefits in vocal training. Correct vocalisation can help protect and improve the health of the vocal cords. With proper breathing techniques and vocalisation, excessive tension and stress on the vocal cords can be reduced, reducing the risk of vocal damage and therefore helping to prevent vocal inflammation, polyps and other vocal problems. Reduce the risk of vocal related problems. This includes problems such as vocal cord damage, vocal fatigue, sore throat and loss of voice elasticity. These problems can be prevented by reducing vocal overstress and bad habits through proper vocal approach techniques and training. Therefore vocal teachers should correct any faulty vocalisation by students with excessive tightness and force and incorrect articulation positions as soon as they become aware of them, so that the vocal system is kept in good condition at all times.

4.2. Prohibition of abuse of voice

Misuse of the voice in vocal teaching has a more serious and sustained damaging effect on the learner's vocal system. Misuse of the voice refers to excessive stress on the vocal folds or the use of incorrect vocal technique, which can lead to vocal injuries and loss of voice quality. Misuse of the voice includes practising for too long without enough breaks, singing in a range for which you are not well suited, straining yourself too hard for too long, and singing at a high volume for a long time, which can lead to inflammation and nodularity due to oversteering of the muscles of the vocal system and build-up of lactic acid. Vocal teachers should arrange the amount of practice gradually, give the learners enough rest time for the vocal system, and always pay attention to their bad vocal condition and correct it.

4.3. Make correct part identification

Performing proper voice part identification is a very important step in vocal instruction. Vocal part identification is the process of determining a learner's voice type and range so that individual learners can be placed in the correct voice part. If the process of voice part identification and placement is neglected, learners who are in the wrong voice part for a long period of time may frequently use incorrect vocal patterns, resulting in oversteering of the vocal system and ultimately damaging the voice system. Therefore, teachers should firstly conduct vocal part tests for each learner, and secondly, pay attention to the feelings of the learners in each vocal part, and make timely vocal part adjustments for those who feel uncomfortable.

4.4. Discomfort in the throat should be treated promptly

If there is persistent discomfort in the throat that is not effectively relieved by rest during vocal teaching, prompt medical attention should be sought. Throat discomfort refers to any discomfort or pain associated with the throat, pharynx, or related structures, such as sore throat, itchy throat, hoarseness, coughing, and foreign body sensation. Many vocal teachers or learners tend to think that resting for a while and taking medication will ease the early symptoms of vocal disorders. However, many disorders such as chronic laryngitis, nodules or polyps, if not diagnosed and treated in a timely manner, can become chronic and even prevent the learner from studying and singing vocally. Therefore, vocal learners need to have their vocal system checked on a regular basis or as needed, so that any signs of illness can be detected and treated immediately. It is also necessary to take precautions against various vocal disorders, including not eating cold and irritating foods, preventing respiratory and lung infections, and drinking more voice care tea.

5. Conclusion

Vocal learning and singing must be based on a healthy vocal system, and many vocal teachers or learners neglect voice health care in vocal teaching, which ultimately leads to a series of health problems, not only do they need to suffer from the pain and trouble of illness, but also the quality of the voice may permanently deteriorate and even make it impossible to perform or learn vocal music anymore. Therefore, it is important to take good voice care as a prerequisite in vocal teaching, always

follow the correct learning and training methods without rushing, correct some wrong techniques and methods in a timely manner, and warm up the vocal cords before performing vocal exercises. This helps to prepare the vocal cords so that they can more easily adapt to the demands of the exercise and reduce the risk of vocal damage. If vocal difficulties, panic and vocal instability occur during vocal practice you should stop immediately to avoid further damage. Rest when the vocal system is fatigued and have the vocal system examined and treated regularly. Although vocal learners use their voices a lot, through good health care, prevention and treatment measures, they can still effectively avoid all kinds of vocal disorders and ensure their own learning progress and career development.

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