SOUND PRODUCTION ERRORS AND METHODS FOR THEIR ELIMINATION (BASED ON PRACTICAL ANALYSIS)

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Abstract: This article highlights the main errors encountered in sound production and their root causes based on practical analysis. In particular, problems such as incorrect breathing, strain on the vocal apparatus, articulatory defects, and improper use of resonators are analyzed from a scientific and pedagogical perspective. The article provides methodological recommendations on breathing techniques, articulatory exercises, methods of resonance formation, and the correct placement of the voice.

Keywords: voice production, vocal technique, breathing, articulation, resonance, vocal apparatus, vocal exercises, practical analysis, voice culture

Introduction

Voice is one of the important communicative and artistic factors that demonstrate a person's natural means of expression, creative potential, and aesthetic culture. Specifically, the correct use of voice in vocal performance, music education, acting, pedagogical activities, and public speaking is one of the primary indicators of professional mastery. Voice production is a complex pedagogical and creative process aimed at creating a natural, free, resonant, and stable voice by physiologically correctly controlling the vocal apparatus, harmonizing breathing, resonance, articulation, and intonational precision.

Although theoretical knowledge regarding voice production is provided sufficiently in the process of vocal education today, in practical classes, some students and performers make mistakes such as incorrect voice production, insufficient breath control, throat pressure, weak diction and articulation, and ineffective use of resonators. Such shortcomings lead not only to a decrease in performance quality but also to strain of the vocal apparatus, voice fatigue, narrowing of the range, and psychological discomfort in the performer. Therefore, identifying errors in voice production, analyzing them, and developing methods for their elimination is one of the pressing issues in vocal pedagogy.

Errors in voice production are often associated with the incorrect formation of the breath support. In vocal performance, breathing is not a simple physiological process, but serves as the primary foundation for sound production. When breathing is performed superficially or uncontrollably, the sound loses stability, phrases break, and intonational clarity is disrupted. Especially at the initial stage, students try to use the throat muscles rather than the breathing support to increase the volume of the voice. As a result, the voice does not sound free, the resonance decreases, and tension arises during the performance process.

Also, incorrect "placement" of the voice is one of the common problems. In sound production, it is important to direct the sound into the free resonance field. If a sound is formed in the throat, nose, or oral cavity without natural resonance, the timbre richness and expressive possibilities of the voice are limited. In this case, the performer has difficulty picking up high

notes, while low notes lose the support of the voice. This leads to a violation of the unity of technical and artistic expression in vocal performance.

The relevance of the article's topic lies in the fact that voice production is not limited to the formation of vocal technique alone, but is also inextricably linked to the performer's general musical culture, hearing ability, breathing control skills, emotional expression, and stage freedom. Timely detection of voice errors and their elimination based on a correct methodological approach create a solid foundation for the performer's future professional development. In particular, for students studying music education, the correct use of the voice is of great importance not only in performing but also in pedagogical activities.

Practical observations show that an individual approach plays a special role in eliminating errors in voice production. Since each student has a different voice, range, breathing style, articulatory capabilities, and psychological state, a single methodological method will not yield the same result for everyone. Therefore, the vocal teacher must deeply analyze the student's vocal capabilities, step-by-step identify existing errors, and apply a system of special exercises aimed at their elimination.

This article examines the primary errors encountered in voice production based on a practical analysis. It analyzes problems such as incorrect breathing, strain on the vocal apparatus, poor articulation, insufficient use of resonance, intonational ambiguity, and psychological tension. It also highlights effective methods for overcoming them - diaphragmatic breathing exercises, articulatory gymnastics, resonator activation, legato and staccato exercises, vocalists aimed at voice liberation, and methods of self-control during the performance process.

The main goal of the study is to identify errors in voice production, analyze their causes from a practical perspective, and develop methodological recommendations for their effective elimination. To achieve this goal, physiological, pedagogical, and performance aspects of the sound production process are studied, errors observed during practical training are classified, and a system of exercises for their correction is substantiated. The in-depth study of errors in voice production and the development of methods for their elimination on a scientific and practical basis are of great importance in improving the quality of vocal education, forming a healthy voice culture in students, and developing performance skills. In this regard, this topic appears as an urgent scientific and practical issue for modern music pedagogy, vocal methodology, and performance practice.

Sound production errors and methods for their elimination.

Voice production is one of the most important stages of vocal performance, in which breathing, sound production, resonance, articulation, diction, intonation, and emotional expression are formed as a single system. Errors encountered during practical sessions are often related to the improper use of the vocal apparatus, insufficient development of the respiratory support, excessive muscle strain, and the performer's inability to control their voice by hearing.

One of the most common mistakes is incorrect breathing and inability to control breathing. Some pupils or students lift their shoulders while singing and breathe superficially. Such breathing is insufficient to maintain sound stability; in the middle of the phrase, breathing is exhausted, and the voice trembles or decreases. To eliminate this error, it is necessary to perform diaphragmatic breathing exercises regularly. For example, exercises such as breathing freely into the abdominal and lumbar regions while standing and slowly exhaling them using the sounds "s," "sh," and "f"

help manage breathing. It is also useful to sing short musical phrases in one breath, to spend breathing economically, and to determine the start and end point of each phrase in advance.

The second important mistake is to suppress the sound in the throat. In this case, the voice does not come out freely; it sounds muffled, loud, or artificial. Usually, such an error occurs as a result of the performer's attempt to force out loud sounds. Excessive tension of the throat muscles negatively affects the vocal cords and leads to rapid voice fatigue. To eliminate this, the performer first develops the ability to relax the muscles. It is necessary to teach them to sing in light "m," "n," and "ng" sounds, to perform quiet vocalises in the lower and middle registers, and to produce the sound "without pushing" in a natural flow. During the lesson, the teacher must strictly adhere to the principle of "producing sound not by force, but through breath support and resonance."

Another common drawback is the incorrect use of resonators. The resonance of the voice depends not only on the vocal cords but also on the harmonious functioning of the chest, mouth, nose, and head resonators. When resonance is insufficient, the sound is dull, weak, and colorless. In some cases, the sound is excessively directed into the nose, and an unhealthy "nasal timbre" appears. To correct this error, it is recommended to perform resonance exercises with the syllables "m," "mi," "ma," and "mo," to mumble in a closed mouth, and to feel sound vibrations around the face, lips, and nose. In this case, the main goal is not to force a sound into a single point, but to find its natural resonance field.

Poor articulation and diction are also important problems in voice production. If the mouth, lips, tongue, and jaw do not work actively enough, the text sounds unclear, vowels and consonants are distorted, and the content of the performance is not fully understood by the listener. Especially in vocal performance, the meaning of the word and the musical expression must be inseparable from each other. To eliminate this deficiency, articulatory gymnastics, rapid pronunciations, open and clear pronunciation of vowels, and exercises to develop lip and tongue mobility are used. For example, singing syllables such as "ma-me-mi-mo-mu," "la-le-li-lo-lu," "da-de-di-do-du" at different pitches activates articulation.

Another error in voice production is the tension of the jaw and facial muscles. Some performers squeeze the jaw tightly during singing, do not open the lips naturally, or overstrain the facial muscles. As a result, the sound does not come out freely, vowels are not fully formed, and the vocal tract narrows. To eliminate this, relaxing the jaw, soft singing on the vowels "a," "o," "u," and light massage of the face and neck muscles before the exercise give good results. The teacher must also monitor the performer's appearance and immediately correct any excessive facial expressions.

Intonational ambiguity is also frequently encountered in practical exercises. This error can be associated with poor auditory control, weak breathing support, incorrect transitions between registers, or psychological insecurity. When the intonation is distorted, the performance sounds musically unreliable. To correct this, solfeggio exercises, precise singing of intervals and scales, checking the pitch using a piano or other instrument, and listening to and then repeating short musical phrases are effective. Recording one's own voice to the student also develops self-analysis skills.

Another important problem is the discrepancy between the registers. Some performers sing low notes heavily in the chest register and sharply compress the voice when transitioning to high

notes. As a result, the voice is not heard evenly, and tension appears on the high notes. To eliminate this error, exercises linking the registers are used, namely glide glissando, legato vocalises, and light singing exercises on the vowels "u" and "i." The goal is to form the vocal registers not individually, but as a single vocal system.

Making a sound too loud or too strong is also a dangerous mistake. Some young performers consider a high-pitched voice to be a sign of good singing. In reality, vocal power is created not through shouting, but through breathing support, resonance, and technical freedom. Excessive force exhausts the vocal cords, makes the timbre rough, and limits the artist's creative possibilities. To overcome this, it is recommended to sing in the dynamics of piano and mezzo-piano, to start the sound softly, and to conduct the phrase with inner energy.

An incorrect start, i.e., an attack error, also plays an important role in sound production. If the sound begins too loudly, the vocal cords strike sharply; if it begins too slowly, the sound is indistinct and without support. The beginning of a correct sound occurs through the harmonious movement of breath, vocal cords, and resonance. To correct this error, soft attack exercises, quiet singing in "ha," "ma," and "na" syllables, and the technique of first imagining the sound in the inner ear and then producing it are used.

Another reason for voiceover errors is incorrect posture. Stooping, raising the shoulders, thrusting the head forward, or excessively tensing the body will interfere with the free functioning of the airways and resonant spaces. In a straight posture, the torso must be upright, the shoulders free, the neck relaxed, the head in a natural position, and the legs must maintain the support point. To form this, one can use singing in front of a mirror, controlling shoulder movements during breathing, and simple plastic and body relaxation exercises.

Practical analysis shows that a step-by-step methodological approach is considered the most effective for eliminating errors in voice production. At the first stage, existing errors are identified: the student's breathing, sound production, articulation, resonance, and intonation are observed. In the second stage, the causes of errors are analyzed. For example, an intonation error can be associated not only with hearing but also with breathing pressure or psychological distress. At the third stage, individual exercises are selected. At the fourth stage, the dynamics of the student's development are monitored, and the exercises are made more complex.

An individual approach to eliminating errors is of particular importance. Each performer has a different vocal range, timbre, physiological capabilities, musical hearing, and psychological state. Therefore, an exercise suitable for one student may not yield the expected results for another. When working with each student, the vocal educator must adhere to the principle of preserving their natural vocal abilities, avoiding strain on the vocal apparatus, and developing them step-by-step.

Also, self-control is an important methodological tool for eliminating errors in voice production. The student must have the ability to listen to their own voice, analyze it through writing, feel their breathing, sense excessive strain in the body, and correct it independently. To achieve this, it is necessary to use audio recordings during lessons, maintain a performance analysis diary, and create a map of errors together with the teacher.

Overall, eliminating errors in voice production is a complex but consistent pedagogical process. In this process, breathing technique, sound production culture, resonance formation, articulation, intonational precision, and psychological freedom must be developed in harmony

with each other. Properly organized practical exercises expand the performer's vocal capabilities, prevent voice fatigue, enrich artistic expression, and elevate vocal performance skills to a higher level.

Discussion.

An analysis of problems related to sound production shows that it is not enough to interpret this process solely as a set of technical skills. In fact, voice is a complex system that combines a person's physiological capabilities, psychological state, and aesthetic thinking. Therefore, it is advisable to consider errors encountered in practical classes not only as a result of "wrong singing," but also as a broader set of pedagogical, psychophysiological, and methodological factors.

Observations show that errors related to voice production are often formed in students during the initial learning stage. If the processes of breathing, sound production, and articulation are not properly established in the initial period, these errors later become a permanent habit, and their elimination becomes much more difficult. This once again confirms the importance of the "right start" principle in vocal pedagogy. This means that the teacher should not only demonstrate the exercise but also explain what physiological and acoustic processes are occurring behind each sound.

At the same time, another aspect that should be paid attention to during the discussion process is the student's level of self-awareness. Many performers do not fully realize the natural potential of their voice and attempt to alter it artificially. This leads to sound compression, loss of resonance, and artificial timbre. In fact, one of the fundamental principles of vocal art is naturalness. The process of working on the voice should not be aimed at "creating a new voice," but rather at correctly revealing and developing the existing voice. From this perspective, the educator's task is to "hear" the student's natural voice and form it without straining.

During the discussion, another important issue - the influence of the psychological factor - deserves special attention. Practical experience shows that stage fright, insecurity, or excessive excitement lead to the occurrence of numerous technical errors. For example, a student may sing freely in class, but when performing in front of an audience, their voice becomes strained, breathing control is lost, or intonation is disrupted. This situation means that voice production is not only a physiological process but is also closely related to psychological stability. Consequently, psychological preparation, stage culture, and the development of self-management skills are also important components in vocal education.

In addition, the results of the discussion once again confirm the priority of an individual approach. Since each student has a different vocal range, timbre, breathing style, and learning speed, a standard exercise system will not yield the same result for everyone. Therefore, the teacher must develop a separate methodological strategy for each student, identify their strengths and weaknesses, and adapt the exercises. This requires not only high professional knowledge from the teacher but also subtle observation and a creative approach.

The use of technological tools to eliminate errors in sound production is also important within the framework of the discussion. In modern conditions, the possibilities for reviewing, analyzing, and identifying student performance errors are expanding through audio and video recordings, visual analysis programs, and online platforms. This strengthens the mechanism of

self-control and develops the student's ability to work independently. At the same time, this process also strengthens interactive cooperation between the teacher and the student.

The results of the discussion lead to another important conclusion: voice production is not a technique mastered in a short time, but a continuously evolving process. Working on the voice requires regularity, patience, and consistency. Behind every small achievement lie systematic practice, the right methodology, and a conscious approach. Therefore, in vocal education, it is important to focus on high-quality and sustainable development rather than chasing quick results.

In conclusion, it can be said that the issue of eliminating errors in voice production requires a comprehensive approach. In this process, high efficiency can only be achieved through the harmonious use of physiological preparation, technical exercises, psychological stability, an individual approach, and modern pedagogical technologies. From this perspective, the problems of voice production in vocal pedagogy emerge as one of the most pressing areas requiring not only practical but also in-depth scientific research.

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