

## A Study on Improving the Singing Skills of Prospective Music Teachers

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### ABSTRACT

The human voice, the oldest, most natural and most fundamental musical instrument known, serves as a primary channel for everyday verbal communication and through the art of singing, transforms into an aesthetic and expressive mean of musical communication. Therefore, the optimal utilization of an individual's vocal potential, the use of the voice in its natural state, and the maintenance of vocal health constitute critical and sensitive issues. Furthermore, the human voice may be regarded as one of the most fundamental and natural instruments in the processes of music learning and teaching, while the song form can be considered among the most basic forms of musical expression. Considering that singing is the goal and natural outcome of voice training, developing the singing skills of prospective music teachers will contribute to their greater confidence and success both during their undergraduate education and in their future professional lives. In this context, the purpose of this research is to evaluate the importance of developing the singing skills of prospective music teachers and to offer recommendations. The research conducted a literature review and employed the interview technique, a qualitative research method. The study group consisted of prospective music teachers studying in the Department of Music Education at Dokuz Eylül University's Buca Faculty of Education and taking a vocal training course. At the end of the research, suggestions were presented in line with the findings obtained for the development of singing skills of music teacher candidates.

**Keywords:** Prospective Music Teacher, Voice Education, Song, Singing Skill.

### INTRODUCTION

#### The art of song

The highest expression of art is music, and the highest expression of music is the art of singing. Music lies at the foundation of universal existence and contributes to our understanding of the harmony, rhythm, and aesthetics necessary for the establishment of order. At the core of the universe lies sound, rhythm, and tone that is, music in its entirety. The human being constitutes the most important musical instrument in the practice of music (Khan, 1994). Consequently, the highest expression of music is manifested in the art of singing. Since emotion represents the fundamental element of art, singing serves as the most direct and profound medium through which emotional expression can be conveyed. The human voice is the only instrument that is a part of the human body and connected to the human soul. The true impulse in the art of singing is the reflection of the emotions belonging to the human soul (Rogers, 2013).

It is widely accepted that music began with singing, and that singing is the most universal musical activity (Potter and Sorrell, 2014). It is even thought that singing existed before musical instruments, before writing and notation, and may even have existed before speech. Although little is known about its origins, it seems plausible that one of the early functions of singing was oral communication (Bicknell, 2015).

Art is the performance or accomplishment of a task based on skill and understanding. In this context, the art of singing refers to the skillful control, manipulation, and use of the voice in music, based on both technique and comprehension. As a musical ability, it can be appreciated both as an end in itself and as a means to an end. As a means to an end, the art of singing represents a form of understanding that involves various intellectual interactions, such as acquiring information, analyzing, and evaluating. As an end in itself, it encompasses multiple levels of musical experience, including emotional, perceptual, and creative dimensions (Rao, 1988).

The art of singing, defined as the special use of the human voice in its biological, psychological, emotional, and aesthetic aspects (Rao, 1988), is also described, with a similar approach, as a complete body and mind experience where physical, intellectual, emotional, and creative qualities coexist (Morrison, 2006). Davran (1997) offers a beautiful definition of the art of singing that encompasses all three fundamental dimensions of human existence: mind, body, and soul (emotion): "The art of singing is the act of gaining control over all the muscles in our body involved in the act of singing, using these muscles as needed, and thus achieving access to the secrets of the human body and soul."

### **The act of singing**

The act of singing as an artistic practice is directly related to the musical structure itself. A singer must be able to control their voice, make the necessary changes and improvements to their voice to meet the demands of the music, and evaluate the results of their actions. The ability to make changes and improvements to the voice depends on the singer's skill and understanding, and is guided by the aesthetic requirements of the music. Therefore, the art of singing can be considered a definable system of artistic processes. As a matter of fact, the act of singing as an art is the ability to use the body in a highly diverse and skillful way for expressive purposes. Thus, like all artistic skills, specific singing skills are practiced with the "standards, values, ideals, and goals specific to the art form" in mind. We practice these skills in light of the best knowledge we possess. When used for musical purposes, singing can be defined as a rational act (Sparshott, 1982). The artistic processes of singing can be described as a three-part process including:

- The artist's intention (what the singer plans to do to produce singing tone and make vocal enhancements),
- The processes initiated (the movements used to transform the voice as a sound generator into sound as a musical instrument), and
- The results obtained.

According to Rao (1988), the art of singing involves the deliberate transformation of the voice to create music, "the intelligent modification, control, and manipulation of the voice based on skill and understanding." More specifically, the art of singing is concerned with how muscles move to create musical effects through the conscious manipulation of many parts of the body, especially the muscles used in breathing, phonation, resonance, and articulation. This deliberate movement of muscles is necessary to modify the voice in the context of music, that is, to change the quality and duration of the pitch. While muscle movements in speech are reflexive and passive, in singing, the movements of the vocal muscles are necessarily deliberate and active. Therefore, even muscle movements that are involuntary in singing and more dependent on the large muscle movements of breathing and articulation become part of the directed, rational actions initiated to produce and control the pitch. In short, to be able to produce music with the human voice, all parts of the vocal system must function as an artistic whole.

McKinney (1994) states: "Being able to manipulate sounds means you know the nature of sound, you know how musical instruments work, and you understand the relationship between the sound instrument and the physical processes that govern it. Being able to manipulate sounds also means you set standards for good sounds, especially by listening to renowned artists who have achieved lasting success and continue to demonstrate vocal freedom and tonal beauty."

### **Singing education**

As O'Bryan and Harrison (2014) note, singing is a nearly universal human practice, appearing across cultures for a wide array of purposes and in diverse contexts. People sing for joy, love, enlightenment, or entertainment, as well as for sorrow, anger, or emotional and spiritual support—expressing the human spirit through music, either individually or collectively. For many singers, formal training becomes an essential pursuit, driven by the desire to convey these emotions as purely and flawlessly as possible. As singing evolved into a more public, professional, and respected art form, the demand for structured training increased to meet higher standards of artistic excellence. While some individuals are naturally gifted in singing, the skill itself is, contrary to popular belief, complex and requires dedicated mastery. This complexity arises from the need for precise coordination and conditioning of the entire body, making training essential for the development of singing abilities. Although contemporary pedagogical approaches have undergone significant changes to address student needs, the transmission of singing knowledge continues to follow the traditional master-apprentice model. Singing students typically seek guidance from experienced professionals, and it is widely acknowledged that the most effective way to master the art of singing remains through individualized instruction (O'Bryan & Harrison, 2014).

Many prominent authors have stated that singing is first an art, then a science, yet research on the subject has been predominantly scientific. However, according to Bunch Dayme (2009), "what is unique is that singing exists within an artistic realm; it is the emergence of physical functions from mental processes interconnected by aesthetic and subjectively expressive determinations." The art of singing has both a technical/mechanical and an aesthetic dimension. Therefore, emphasizing both in vocal training is crucial for individuals to develop a strong foundation in both aspects and to improve their performance skills.

Rogers (2013) expresses the subject as follows: "The art of singing, in its entirety, is nothing more than the skill of using the human voice—the most wonderful of all musical instruments—correctly, beautifully, and effectively. When the act of singing is a passion and discipline in a person, the art of singing will be successfully elevated to its peak, both technically and aesthetically."

Stark (2003) offers the following perspective: “There is an expressive power in the trained singing voice that I like to call ‘vocal aesthetics.’ This is the singer’s power to surprise, enchant, or impress the audience in a way that no other instrument can. Part of this expressive power, of course, stems from the presence of words that convey their own meaning. But beyond linguistic communication, there is another level of expression that arises from advanced vocal techniques. These techniques include timbre, interval and register characteristics, degrees of vocal intensity, vocal agility and richness, vocal onset, legato, portamento and other forms of articulation, trills, and rhythmic flexibility. Taken together, these techniques form what might be called a classic vocal ‘expression,’ as they are so well suited to the trained singing voice and distinguish it from both other forms of vocal use and instrumental expression.”

According to O’Byran and Harrison (2014), the emergence of research in the fields of vocal physiology and acoustics revolutionized singing pedagogy, with the greatest change in understanding and teaching singing technique occurring in the last 30 years. However, while research in the field of vocal science can identify the biological and acoustic properties of the vocal mechanism, it cannot tell the individual how to conduct vocal training or how to teach singing skills. In this context, specific pedagogical strategies used by vocal trainers include the use of visual imagery through verbal instructions, the imitation of good vocal models, and gestural instructions. Singing techniques and pedagogy have changed in response to shifts in musical and societal demands. Observable changes in singing pedagogy from the beginning of the 19th century are clearly visible in the literature (O’Byran and Harrison, 2014).

One of the most significant recent contributions to the literature on classical singing is Janice Chapman’s *Singing and Teaching Singing* (2006; revised 2011). In this work, Chapman explores a wide range of teaching and learning concepts, addressing not only the philosophy of vocal instruction but also the anatomical and acoustic foundations commonly found in vocal pedagogy texts. She further highlights the interdisciplinary nature of singing instruction. Chapman’s pedagogical approach integrates three principal perspectives, which she defines as “holistic, physiological, and incremental.” She asserts that effective teaching is always grounded in a guiding philosophy and maintains that “teaching is a creative process, never static, and must be continuously nourished by teacher/student interaction and development” (cited in O’Byran & Harrison, 2014). In line with this, O’Byran and Harrison (2014) summarize their educational philosophy as follows: “We base our knowledge on more than a century of scientific research into the mechanism of speech and value the age-old art of apprenticeship: learning by showing, doing, and transforming.”

According to McKinney (1994), singing is not a natural process but an art that requires mastery and highly developed muscle coordination. Therefore, effective training for developing singing skills necessitates the cultivation of the appropriate muscular structures through carefully planned exercise programs. The coordination of all the processes involved in singing is achieved through the harmony of a strengthened, alert, and lively mind, together with a healthy and vibrant body. Consequently, regular and systematically planned practice several times a week should be the goal for all singers. As Wilhelm Ehmann (1968) observes, “The singer uses his/her body both to sustain his/her life and to develop his/her art. He/she can never escape it, because his/her physical life either advances or hinders his/her artistic life” (cited in Buchanan, 2014).

Somatic educators study and teach the practical relationship between mind and body in action. The term somatic is derived from the Greek root soma, which is literally translated as “study of the body” (Johnson, 2009). In the field of education, Caplan (2009) explains that somatic refers to both the “study of the body in motion” and the “subjective experience of movement” (cited in Buchanan, 2014). In this context, Mingle (2018) emphasizes that the nature of singing is inherently somatic: mind, body, and spirit are embodied in the physical, expressive instrument that communicates through the body’s sound. Therefore, it is reasonable to conclude that principles underpinning somatic teaching methods can provide valuable tools for vocal instructors seeking to guide students toward realizing their intentions through efficient, coordinated, safe, and artistically expressive movement patterns.

A crucial factor in developing individuals' singing skills is the harmony between teacher and student. The impact of relationship on each individual's well-being is an important topic studied through social psychology theories. In this context, developing a healthy and successful relationship between teacher and student in one-on-one instrumental/vocal training can affect the student's performance outcome and benefit their learning processes (Kennell 2002; cited in Serra Dawa, 2014). Ideally, the relationship between teacher and student, which in most cases spans several years, should be a source not only of musical knowledge but also of inspiration, motivation, and psychological development. A healthy relationship provides space for the development and growth of all these qualities; however, in relationships lacking solid harmony, the student's development may be hampered. Therefore, care should be taken in pairing singing teachers and students (Serra-Dawa, 2014).

The vocal training process—traditionally centered on one-to-one instruction between instructor and student in the classroom—has long been, and should continue to be, a fundamental component of music education. Nevertheless, substantial pedagogical benefits may also be derived from the professional interactions that occur when vocal instructors participate in each other’s practices when students share the experiences acquired through such exchanges (Harrison & O’Bryan, 2014).

Finally, to summarize as Harrison and O’Bryan (2014) also state: “While we may never know the origins of singing in all its complexity, we do know it to be part of the human condition. As folk singer Pete Seeger notes: *“Songs are funny things. They can slip across borders. Proliferate in prisons. Penetrate hard shells. I always believed that the right song at the right moment could change history (1955 ).* The singing teacher in the twenty-first century is therefore charged with an awesome responsibility. It is important for teachers and students to perform songs in a way that makes change possible through all kinds of songs. After all, that’s what singing is.”

In this context, the primary research question of the study is: “What is the importance of improving the singing skills of prospective music teachers, and what activities are carried out to achieve this goal?”

### Sub-Problems

1. What is the importance of developing the singing skills of prospective music teachers?
2. What is the importance and role of acquiring technical knowledge and skills for vocal training at the theoretical and practical levels in developing the singing skills of prospective music teachers?
3. What is the importance and role of theoretical knowledge regarding the composer, period, genre, singing style, meaning of the lyrics if the work is in a foreign language, subject, story, etc., in developing the singing skills of prospective music teachers?
4. What is the importance and role of speaking exercises in developing the singing skills of prospective music teachers?
5. What is the importance of correct, beautiful, and effective interpretation of works in developing the singing skills of prospective music teachers, and what studies should be done for this purpose?
6. What is the importance and role of correct repertoire selection in developing the singing skills of prospective music teachers?
7. What is the importance and role of technological developments in developing the singing skills of prospective music teachers?

### Purpose and importance of the research

The aim of the Vocal Training course, one of the most important and fundamental courses in the Music Education Undergraduate Program, is to develop the speaking and singing skills of prospective music teachers. Considering that the human voice is the most basic and natural instrument used in music education, and that singing skills are the aim and natural outcome of vocal training, providing prospective music teachers with sufficient and high-quality training in terms of knowledge and practice in the field of vocal training, and developing their singing skills, becomes even more important. Improving the singing skills of prospective music teachers will contribute to their being more equipped, confident, and successful both during their undergraduate education and in their future professional lives. Furthermore, while using their own voices correctly and setting a good example for their students, they will also teach and instill a love of singing in their students in the best way possible, while protecting their vocal health. On the other hand, music is the highest expression of art, and the highest expression of music is the art of singing. The fundamental element in art is emotion, and in the art of singing, there is a direct expression of emotions belonging to the human soul. Furthermore, it is a generally accepted understanding that music begins with singing and that singing is the most universal musical activity. Therefore, all these reasons make this study important. In this context, the aim of the research is to evaluate and make recommendations regarding the importance of developing the singing skills of prospective music teachers. To the extent that studies in our country are accessible, research in the field of voice training has generally focused on the fundamental processes of voice training, such as "posture, physical-mental and spiritual comfort, breathing, phonation, resonance, and articulation," as well as students' attitudes towards voice training lessons, motivation, self-efficacy levels, voice health, voice defects, voice training repertoire, voice exercises, imagery in voice training, approaches and methods used in voice training, examination of voice training curricula, etc. Therefore, since no studies on this subject could be found, it can be said that this study is the first of its kind. It is hoped that this study, which is considered important for improving the quality of the "Voice Training" courses in the Music Education Undergraduate Program, will be useful for voice trainers, students, and young academics, and will shed light on new research to be conducted.

### **Limitations**

This study is limited to 2nd, 3rd, and 4th-year students enrolled in the Music Education Department of the Buca Faculty of Education at Dokuz Eylül University who have taken and are currently taking vocal training course. 1st-year students were not included in the study as they had recently started taking vocal training courses.

## **METHODOLOGY**

### **Research Design**

In this research, a literature review was conducted and a qualitative research method was used. A literature review is the reading, selection, and effective critical evaluation of existing information, thoughts, discussions, speculations, and findings related to the research area in order to achieve a specific goal (Ekiz, 2003). For a literature review, it is recommended to conduct a comprehensive examination, especially of the literature of recent years, to reveal the direction of global trends, and to access both domestic and international literature (Demirel, 1999). In line with these recommendations and the purpose of the present study, relevant national and international literature on the subject was examined.

“Qualitative research is research that follows a qualitative process aimed at presenting perceptions and events realistically and holistically in their natural environment, using qualitative data collection methods such as observation, interviews, and document analysis” (Yıldırım and Şimşek, 2004).

The research data was collected using the interview technique, one of the qualitative research methods. Briggs (1986) argues that the interview is the most common data collection method used in research in the social sciences. According to Briggs, the interview method is a highly effective method for obtaining information about individuals' experiences, attitudes, opinions, complaints, feelings, and beliefs (cited in Yıldırım and Şimşek, 2004). The interview, which is a technique for collecting data verbally, is a conversation organized for scientific purposes. A scientific interview needs to be carefully planned in advance (Arlı and Nazik, 2004).

The interview serves two main purposes: 1. To motivate the interviewee to provide complete and accurate answers, and 2. To eliminate biases stemming from factors such as social willingness or conformity. The interview is structured to create a social environment that facilitates free information exchange between two individuals (interviewer and interviewee) in order to reveal the interviewee's interests, views, attitudes, and behaviors. The interviewer must achieve these goals through interaction with the interviewee (Delmann, 1978; cited in Balcı, 2004). The success of the interview largely depends on selecting an unbiased sample, and this stage is a crucial task for the interviewer (Balcı, 2004).

This research also functions as a "case study." “A case study is an empirical research method used when examining a current phenomenon within its real-life context, where the boundaries between the phenomenon and its context are not clearly defined, and where multiple sources of evidence or data are available” (Yin, 1984).

In light of this information, the study defined the art of singing, singing skills and singing education by reviewing relevant domestic and foreign literature. Furthermore, based on the opinions of prospective music teachers, an attempt was made to identify the importance of developing singing skills and the studies that have been and should be conducted for this purpose.

### **Study Group**

The study group of the research consists of 25 prospective music teachers studying in the Music Education Department of the Buca Faculty of Education at Dokuz Eylül University who have taken and are currently taking vocal training course.

### **Data Collection Process and Tools**

In this study, a "semi-structured interview form for prospective music teachers" was used. The interviews were conducted with a total of 25 students studying in the Music Education Department of the Fine Arts Education Division at Buca Faculty of Education and taking vocal training courses. The semi-structured interview form prepared for data collection was evaluated by 4 vocal training experts, 2 music education experts, and 2 education science experts, and as a result of these evaluations, the number of items was determined to be 10. When preparing the interview questions, care was taken to ensure that they were clear and understandable, written in simple language, had a quality that could serve the purpose in terms of content, and that there was consistency between the questions. The data obtained by conducting interviews with each of the prospective music teachers were stored in the form of interview notes and audio recordings.

### Data Analysis Techniques

The interview form, prepared based on expert opinions and piloted with 5 individuals, was administered to a total of 25 students. Interviews were recorded and transcribed using audio recordings and notes. The transcripts were analyzed using descriptive analysis methods. To ensure the validity of the analysis, the recordings were transcribed and analyzed by two separate researchers. To confirm the validity of the data, the data sources were revisited. In analyzing the interview data, the prepared questions were first categorized. Then, the responses to each question were divided into sub-dimensions based on frequency of use, and sample sentences related to each category were identified from among similar sentences.

## FINDINGS

### Findings Related to the First Sub-Problem

The first sub-problem of this research is as follows: What is the importance of developing the singing skills of prospective music teachers?

#### Category: The importance of singing skills

**Question 1:** In response to the question, “As prospective music teachers, what are your thoughts on the importance of developing your singing skills in terms of your education and future career?”, all students emphasized that developing singing skills is crucial both during their undergraduate studies and for their future professional careers. The reasons they provided are as follows:

- Since the human voice is the only instrument all humans possess, all music teachers should be able to sing at a sufficient level.
- Because many subjects/fields in the education process require the use of the voice, knowing how to use it without damaging it is important and necessary.
- In the future, it will be easier to impart knowledge and skills to young students through singing.
- A music teacher will almost always need their voice and will always have to use it in their lessons. Furthermore, a teacher is a role model; therefore, a music teacher who uses their voice correctly and effectively will both be a good example for their students and motivate them.
- A music teacher should have a distinctive voice, whether singing children's songs to students in a family setting or in different social environments, or confidently singing in a choir they participate in as a music teacher.
- Possessing advanced singing skills equips prospective music teachers for their professional careers and plays a crucial role in fostering students' love for music.
- Singing, which is crucial for musical development, especially for children's musical development, is a skill that helps in conveying emotions, building self-confidence, and communicating.

Example sentences:

Interviewee 1: The human voice is the only instrument all humans possess. Therefore, all music educators need to be able to sing at a sufficient level. For example, when teaching world music to high school students, demonstrating it practically rather than just having them listen will provide much more lasting learning.

Interviewee 9: I believe that improving my singing skills is important both in the educational process and in my future professional life. Singing helps to convey emotions, build self-confidence, and communicate. During the educational process, it helps me both develop my own musical perception and gain mastery of different styles. In this way, I can introduce my students to different types of music in the future. I can also guide them in stage discipline and building self-confidence.

Interviewee 13: I believe that developing singing skills in music education programs is the most valuable and fundamental achievement a prospective music teacher should acquire. Singing training should be the priority in music education. Instrumental playing should come afterward, as many scientific studies argue that students who haven't acquired singing skills will also be unable to perform well on their instruments. During the educational process, students internalize much musical knowledge through singing, better understanding their own voice and learning what they can do. This process, on the one hand, improves musical reading and writing skills, supports inner ear development, and directly affects the student's ability to have a well-trained ear. Furthermore, developing singing skills helps prospective teachers use their voices more healthily, effectively, and clearly, contributing to their self-expression and building confidence in their performance. We can say that a music teacher candidate who understands the importance of singing will conduct their lessons with an approach that prioritizes singing throughout their professional life. This approach by the teacher will positively influence the attitudes of children and young people towards singing in music lessons in educational institutions. Therefore, prospective music teachers need to know and understand why acquiring singing skills is so important in this context.

### Findings Related to the Second Sub-Problem

The second sub-problem of the research is as follows: What is the importance and role of acquiring technical knowledge and skills in vocal training at the theoretical and practical levels in developing the singing skills of prospective music teachers?

#### Category: Technical knowledge and skills

**Question 2 a):** Regarding the question, "What are your thoughts on the importance and role of theoretical achievements in vocal training in developing your singing skills? (human voice, its characteristics, voice types, voice formation processes "breathing, phonation, resonance, articulation", etc.), all students stated that these achievements are important. The reasons were expressed as follows:

- Music teacher candidates' awareness of their own voices and knowledge of vocal physiology will contribute to their more accurate performance of the art of singing.
- Knowledge of theoretical concepts related to vocal training will make individuals more conscious and contribute to the conscious and correct use of the voice.
- Conscious learning will accelerate and facilitate the learning process.
- It will ensure technical development.
- It will enable them to be more knowledgeable and aware of the human voice, its characteristics, anatomy, and physiology. Knowing these skills is especially important when teaching students as a music educator.
- It will enable them to become more competent and professional in the field of music teaching and vocal training.
- It will greatly contribute to the acquisition and development of singing skills in music teacher candidates.
- It will contribute not only to technical development but also to healthy and consistently correct vocal use.
- It will ensure the protection of vocal health and prevent damage to the voice.

Example sentences:

Interviewee 1: Instead of singing flatly and unconsciously, knowing the physiology of this will allow us to perform our art more accurately.

Interviewee 3: These theoretical gains are of great importance in terms of using the voice correctly and not damaging it. I think that breathing exercises and articulation, in particular, play a big role in terms of expressive power.

Interviewee 17: I believe that we need to know what we do well. If I want to improve my singing skills, I must first recognize the voice and understand how it is produced. Knowing the types of voices and their characteristics is very important in order to better understand my own voice. I think that just practicing is not enough to improve the voice; theoretical knowledge is very important to understand what we do, why we do it, its benefits, and to move ourselves forward.

**Question 2 b):** To the question, "What are your thoughts on the importance and role of acquiring technical knowledge and skills for vocal training at the practical level in developing your singing abilities? (Correct posture, mental, emotional and physical relaxation, ensuring correct breathing and breath control, establishing the correct voice-breath connection and producing the correct voice, achieving resonance, register transitions (head voice, mid-range and chest voice), articulation, etc.)," all students expressed the opinion that these acquisitions are important. Their reasoning was that it leads to the conscious, confident, healthy, relaxed, correct, beautiful and effective use of the voice. Furthermore, it was stated that this knowledge and these skills are absolutely essential for becoming better equipped as prospective teachers.

Example sentences:

Interviewee 7: I think learning technical skills through practice is absolutely essential for improving my singing skills. A natural and fluid voice is very important, but this naturalness is only possible with the right technique. For example, when I'm singing a song I love on stage, if I'm not in the right posture or I can't control my breath properly, my voice is immediately affected, which lowers my performance. Mental and physical relaxation are also part of it. Since we convey not only the voice but also the emotion, if I'm nervous or my body is tense, it immediately reflects in the song.

Interviewee 8: Actually, for me, technique is everything. We learn to sing comfortably with technique. Every sound we produce without technique damages our vocal cords. I think correct posture is very important, because slouching, in particular, reduces lung capacity, causing us to breathe less, which of course affects us greatly.

Breath support is everything in singing, in my opinion. If we don't breathe in the right place and don't use apoggio, our larynx stays high, which especially hinders us in high notes (the timbre is distorted or doesn't reach the high notes directly). The register is also a very important concept. Knowing and learning the correct transitions according to our own vocal timbre is crucial, because otherwise, we can't reach high notes without pushing the voice. Singing outwards, not clouding the voice internally, is also very important. For this, diaphragm support and breath control are essential.

Interviewee 17: I believe that acquiring technical knowledge and skills is the most important aspect of developing singing abilities. Correct posture, comfort, and proper breathing are fundamental and crucial, like the foundation of a building. Technical details such as resonance, articulation, and register transitions are skills related to singing quality. I think acquiring these skills is very important for vocal health and conscious singing.

### **Findings Regarding the Third Sub-Problem**

The third sub-problem of the research is as follows: What is the importance and role of theoretical knowledge about the composer, period, genre, singing style, meaning of the lyrics (if the work is in a foreign language), subject (if any), story, etc., in developing the singing skills of prospective music teachers?

#### **Category: Theoretical achievements**

**Question 3:** In response to the question, "In vocal training classes, are students informed about theoretical topics such as the composer, period, genre, singing style, meaning of the lyrics (if the work is in a foreign language), subject (if any), story, etc.? What do you think is the importance and role of these knowledge acquisitions in developing your singing skills?", the vast majority of students stated that they were informed, one student stated that this information was not given in class, one student stated that it was given rarely, and one student stated that it was given occasionally when the opportunity arose. Their general thoughts on the importance and role of these achievements are as follows:

- Ensuring a more accurate mastery of the work being studied,
- Contributing to a correct interpretation by understanding, feeling, and reflecting the intended emotion of the work,
- Providing a confident, beautiful, and meaningful performance,
- Contributing to a better understanding of the work, the period, and what the composer wanted to convey. It also serves as an encouraging factor in learning about periods and composers,
- Ensuring an enjoyable performance by immersing oneself in the work,
- Contributing to musicality through a correct, beautiful, and effective performance.

Example sentences:

Interviewee 1: This information is generally overlooked in class. I think the conditions of the time the piece was written and the composer's intentions are factors that will make a difference during the performance.

Interviewee 8: I always thoroughly examine a piece before I start singing it. I even do it before listening to it. If the piece is in a foreign language, I think it's very important to know the meaning of the lyrics and, if applicable, the subject or story of the piece. It's briefly mentioned in our lessons, but I look into it in detail. Knowing these things makes a difference in my interpretation of the piece, because it's not just about producing the sound correctly, but also about conveying the emotion correctly. It would be very difficult to feel and reflect that emotion without knowing what the song is about. For example, knowing which period a piece belongs to also shapes our style of singing. There is a big difference, both technically and emotionally, between a Baroque piece and a Romantic piece. Similarly, knowing the composer, at least having an idea about their musical language, helps to interpret the piece more accurately.

Interviewee 14: During my student life, I rarely received information. But I consider it important and necessary. Because when you sing, you can direct your expressions in this way. Otherwise, you just act according to the feelings the melody evokes in you, and in that case, you only add your personal interpretation.

Interviewee 25: Information is provided. After learning this information, the works we sing gain more meaning.

### **Findings Regarding the Fourth Sub-Problem**

The fourth sub-problem of the research is as follows: What is the importance and role of speaking exercises in developing the singing skills of prospective music teachers?

**Category: Speech exercises in singing**

**Question 4:** To the question, “What is the importance and role of speaking exercises in developing your singing skills? Do you do diction and articulation exercises in voice training classes, especially pronunciation and articulation exercises for songs written in foreign languages?”, all students stated that speaking exercises are important and the vast majority stated that they do these exercises. The answers given are generally as follows:

- Especially in works written in foreign languages, pronouncing words correctly and understanding their meaning directly reflects on the expression. Therefore, if the work is written in a foreign language, attention should be paid to pronunciation in order to perform it correctly.
- Being able to say words correctly ensures that the song is understandable and fluent.
- To prevent the work from losing its meaning, it is important to say it correctly without distorting its meaning and emotion.
- If a person's speech is fluent, their singing is also good.
- If the work is written in a different language, it is important to sing as well as native speakers to keep that culture alive.
- It ensures that the words are conveyed clearly and understandably to the listener during the performance, helping to accurately reflect the emotion and expression. These are important in strengthening the interpretation in the song.
- It contributes to a more technical way of singing.
- It is a useful preliminary exercise to focus on the work rather than pronunciation while singing.
- Through speech exercises, the difference between correct and incorrect pronunciation becomes very clear.
- Speech exercises are important for improving a person's singing experience, providing the listener with a more pleasant and aesthetically pleasing listening experience.
- These exercises contribute to the most accurate, beautiful, and effective performance of the piece.

Example sentences:

Interviewee 11: If our speech is fluent, our singing is also good. Before singing foreign songs, we always work on how to pronounce the lyrics. Even if the song is in a different language, it's important to sing it as well as the native speakers, because we are keeping that culture alive.

Interviewee 13: Yes, I definitely do articulation exercises. I find "declamation opera" particularly helpful. That is, in the sense of "oratory" or "expression," it refers to works where the words are emphatic and impactful. Trying and practicing this helps strengthen the chest and middle registers in particular. In singing, speech exercises play a role in seeing the text as a whole and understanding the words as a whole. It ensures that the words are conveyed clearly and understandably, and helps the performance accurately reflect emotion and expression. These exercises are important in strengthening song interpretation.

Interviewee 17: Speech exercises are very helpful for using the voice in the correct position and with correct pronunciation, and we can clearly distinguish between right and wrong. In foreign language works, I think it's very important to do speaking exercises before performing a song to ensure correct pronunciation. It's a useful preparatory exercise to focus on the piece rather than the pronunciation while singing.

Interviewee 19: I frequently did articulation and diction exercises with all the teachers I worked with. It's not just about singing; it's something we need to pay attention to in our daily lives when communicating with people, and also when we serve as role models for our students as teachers.

**Findings Regarding the Fifth Sub-Problem**

The fifth sub-problem of the research is as follows: What is the importance of correct, beautiful, and effective interpretation of musical works in developing the singing skills of prospective music teachers, and what studies should be conducted for this purpose?

**Category: The importance of interpretation and interpretation studies**

**Question 5:** The answers given to the question, "What are your thoughts on the importance of correct, beautiful, and effective interpretation of musical works and studies aimed at this purpose in developing your singing skills?" are generally as follows:

- To show the necessary respect to both the composer and the audience, every task should be performed with due diligence. Therefore, a good interpretation of the works is crucial.

- It helps the individual to gradually develop and solidify their own ideas and feelings.
- Singing is not just about playing the correct notes and singing the song correctly, but also about conveying emotion.
- A good interpretation highlights the beauty of the work, giving the listener more pleasure.
- Interpretation plays a huge role in reflecting the spirit and meaning of the work.
- One of the most important aspects of musical expression is understanding the message of the work, accurately reflecting its spirit and emotion, interpreting the work well, and conveying this to the listener. Therefore, the better a work is interpreted, the more beautiful an impact it leaves.
- When performing a work, technical equipment must be integrated with emotional and artistic expressive power.

Example sentences:

Interviewee 1: Beyond singing, I think every job should be done with dedication so that we can show respect to both the composer and the audience.

Interviewee 9: Simply singing a piece correctly technically is not enough to fully bring it to life. One of the most important aspects of musical expression is being able to correctly interpret the spirit and emotion of the work and convey it to the listener.

Interviewee 13: I think that improving singing skills is more than just singing correctly and with the right technique. For the correct, beautiful, and effective interpretation of works, it is necessary to understand the message that the composer and lyricist want to convey, to adhere to the notation, and to pay attention to the rhythm and tempo. Clear and understandable expression of the lyrics is important for the emotional comprehension of the work. Each song genre has its own unique interpretation style. For example, the way an opera aria is interpreted differs from the way a folk song is interpreted. Furthermore, for a singer to understand their own emotional world, develop their expressive abilities, and use their body as an instrument, it is beneficial to practice physical relaxation and mindfulness exercises.

Interviewee 15: ...When performing a piece, technical equipment must be integrated with emotional and artistic expressive power.

**Question 6:** “In vocal training classes, which of the following exercises do you use to improve the interpretation of musical works, and what are your thoughts on their effectiveness? What are your brief opinions on each item? If you have any examples from your own life, would you share them?”

- Expressing musical phrases through speaking exercises
- Nuance exercises for better expression of musical phrases
- Knowing/learning the meaning of song lyrics written in a foreign language
- Gaining knowledge about the subject/story of the works
- Expressing the works with musical expression in accordance with the lyrics
- Establishing a connection between the individual's life and memories and the emotion created by the lyrics and melody of the works
- Imagination exercises related to the emotion created by the lyrics and melody of the works
- Examining the works from historical, social, and philosophical perspectives

In response to this question, 17 students generally stated that they did the first 6 exercises, 6 students stated that they did all but the last item, and 2 students stated that they did all the exercises.

Example sentences:

Interviewee 10: Expressing musical phrases through speech exercises: We do this in class. This exercise is effective in making the musical phrase more meaningful by standardizing it in the mind and performing it more appropriately. Nuance exercises for better expression of musical phrases: We do this in class. When we break the piece down into parts and establish the nuances sentence by sentence, the overall piece is expressed more quickly and beautifully. Knowing/learning the meaning of song lyrics written in a foreign language: We do this in class. Knowing the meaning of the lyrics allows us to better express the emotions conveyed by the lyrics when performing the piece. For example, if a piece contains sentences about longing for a loved one, when I read the piece, I amplify the feeling of longing for my loved one and reflect this emotion in my voice and manner of singing. Gaining knowledge about the subject/story of the pieces: We do this in class. Knowing what the piece is about helps us know what emotion to sing it with. When the subject/meaning is known, singing as if you are living

the story helps to add a much more beautiful interpretation to the piece. Expressing the work through musical storytelling in accordance with its lyrics: We do this in class. It's important for conveying emotion to the listener. Connecting the individual's life experiences and memories with the emotion created by the lyrics and melody of the work: I experienced this in our last lesson. While working on the piece "Nina," with my teacher's guidance, knowing where and how to make nuances, and with the emotion that comes from knowing the story of the piece, I interpreted the work in its most beautiful form, and my eyes truly filled with tears while singing it.

Interviewee 13: I do all of these exercises. In speech exercises, I find working through passages particularly helpful. For example, there's a word in the piece that reflects a certain emotion. I always learn the meaning of that word (if it's in a foreign language), and the melody and lyrics are usually composed/written to match that meaning. In one passage, the word "piango" means "I cry," and the expression there requires the necessary emotion and expression in the voice. For this, understanding the lyrics written in a foreign language is very important, and the musical expression must be appropriate. Regarding expressing musical phrases well, especially if the piece is in the style required by the Bel Canto period (e.g., Bellini, Donizetti, Verdi), I focus especially on being able to perform the messa di voce in a distinct and beautiful tone. I think about these nuances and perform them within the piece. Learning the subject matter of the piece (especially if it's an opera aria) is important for accurately portraying the role. If I'm singing a mezzo-soprano role, knowing the character and attitude of that role actually represents an understanding that goes beyond just vocal technique. Because details like whether the mezzo-soprano is singing in a lyrical or dramatic style in the piece allow me to perform the work well and accurately. I think I do more imagery work in Tchaikovsky's romances than in the lyrics. For example, I visualize a place, a smell, colors, etc., mentioned in the song. A good example of this is Schubert's *Erkönig*, with a poem by Goethe. This song has an effect that directly brings out imagery. I also value the historical, social, and philosophical examination of the work. Because during the period in which the works were composed, composers were influenced by and interacted with intellectual people in other fields of art (poets, painters, etc.). Therefore, learning what the composer wanted to convey, who they communicated with at that time, and who they read allows us to connect with the work more deeply.

**Question 7:** The answers to the question, "In vocal training classes, what kind of exercises do you do yourself to improve your interpretation of musical pieces? What are your thoughts on the impact and benefits of these exercises in developing your singing skills? (Participating in scientific activities, reading publications on the human voice and its training, listening to different music and singing styles, attending concerts, etc.). If you have any examples from your own life, would you share them?" are generally as follows:

- Performing technical exercises focusing on breath and voice,
- Trying to understand the work through its lyrics and musical structure,
- Conducting research on the work and the composer,
- Listening to the work performed by many different artists,
- Listening to music and songs in different styles,
- Attending musical events, operas, and concerts,
- Reading articles about the human voice, participating in scientific events, and attending masterclasses,
- Trying to learn how artists use techniques by listening, watching, and observing. • Actively following many opera pages on social media, communicating with opera artists, and learning about their techniques.

Example sentences:

Interviewee 8: Honestly, I've done a lot in this area. I'm someone who closely follows the events of the Izmir State Opera and Ballet and the Ahmet Adnan Saygun Art Center, and I frequently attend concerts (especially opera performances, opera nights featuring arias by specific composers, symphony orchestra concerts, etc.). Attending these concerts and listening attentively has definitely allowed me to better understand certain things in my field, sometimes seeing what shouldn't be done, and sometimes learning things that can improve my technique. I've also been watching the semi-finals and finals of some vocal competitions open to the public since I started working in this field, and this has also helped me better understand what I should or shouldn't do in my area. I also actively follow and watch many opera pages on social media. This again allows me to find things that can help me improve myself. Sometimes I especially contact foreign opera singers and ask them questions about their techniques. I've actually incorporated this into my life, so I'm very open to anything that can help me improve myself and I strive to learn as much as I can.

Interviewee 13: I listen to numerous examples of the works I'll be studying on digital platforms, and this greatly helps me fully learn a song. This way, I see different interpretations and learn about alternative interpretations I might prefer. I read scholarly articles to learn about the historical background of the art of singing. This allows

me to understand in detail the history and evolution of singing, which holds such an important place in human life. In addition, I attend masterclasses and opera performances to improve my knowledge and skills in singing.

Interviewee 24: To perform the piece better, I listen to different interpretations, research the work and its composer. I believe that because I understand the emotion and the piece better, I can perform it better.

### **Findings Related to the Sixth Sub-Problem**

The sixth sub-problem of the research is as follows: What is the importance and role of choosing the right repertoire in developing the singing skills of prospective music teachers?

#### **Category: Repertoire in singing**

**Question 8:** The answers given to the question, “What is the importance and role of choosing the right repertoire in developing your singing skills? (When you evaluate the selection of works in the right key for the appropriate repertoire, the selection of works suitable for your age and maturity level, the ease/difficulty level of the works in terms of melody, rhythm and harmonics, etc.). If you have had a positive or negative experience in this regard, would you share it?” are generally as follows:

- In repertoire selection, readiness, vocal range, vocal timbre, age, experience, musical skills, and technical level are important. Choosing the right repertoire will allow the student to both recognize their own vocal characteristics and come to class more willingly.
- Choosing the right repertoire is crucial for correctly interpreting and doing justice to a piece from a technical and musical perspective. Incorrect choices can cause the best aspects of the piece to be lost.
- To interpret a piece beautifully, one must first embrace and love it. This allows for a more accurate and effective performance.
- Choosing the wrong piece can discourage a student from continuing the lesson and seriously damage their voice, resulting in a performance below average.
- Choosing a piece that suits one's taste and talent will allow them to interpret the piece comfortably and confidently, and with enjoyment and willingness.
- Pieces that allow a person to showcase their talent are important for both the singer and the listener.
- Maintaining vocal health is important for using the voice more accurately, comfortably, and effectively.

Example sentences:

Interviewee 1: I think that different types of songs should be included in vocal lessons so that the student is more motivated to come to class and can more easily find their own vocal timbre. My teacher took an innovative approach in this regard, and because of this, I deliberately left the class and took vocal lessons for another half-semester.

Interviewee 13: Choosing the right repertoire is actually more important in terms of not harming the student's voice. Determining the area where the student feels most comfortable with their voice and can perform at their best is the most important step in developing singing skills. Choosing pieces that exceed the student's readiness level and push their vocal limits can both discourage the student from the lesson and seriously damage their voice. Also, giving a melodically and harmonically difficult piece to a student who is not good at sight-reading and solfège can cause the student to lose interest and feel inadequate. This is completely outside the goals of vocal training lessons.

Interviewee 14: I think choosing the right repertoire is extremely important. A repertoire can enhance or diminish the value of a voice, or even harm it. I enjoy singing when the piece suits my voice. Singing an unsuitable piece feels like an obligation and is very boring. Also, my voice gets hoarse and my desire to sing decreases.

Interviewee 23: Choosing the right piece is important both for development and motivation, and for vocal health.

### **Findings Regarding the Seventh Sub-Problem**

The seventh sub-problem of the research is as follows: What is the importance and role of technological advancements in improving the singing skills of prospective music teachers?

#### **Category: Technology in singing**

**Question 9 a):** The answers given to the question, "What is the importance and role of technological advancements in improving your singing skills?" are as follows:

- With technological advancements, access to many works, working techniques, and theoretical knowledge has become easier through quick and efficient methods.
- It provides the opportunity to instantly listen to a song of interest and easily learn all kinds of information about it.
- It provides the opportunity to easily learn all kinds of information related to vocal training.
- It contributes to accessing the sheet music of works.
- It allows one to go beyond the sheet music and see different performance styles, listen to examples of works from many master artists, and develop critical skills.
- Since many songs also have karaoke versions, it allows one to sing along.
- Digital platforms contain all the necessary information and unlimited content to improve vocal training skills.
- Thanks to online lessons, students can improve their voice and singing skills with an instructor through online classes.
- Voice recording devices, computer programs, and various applications allow for recording, listening, analyzing, and identifying errors, as well as enabling both analysis and evaluation by improving the voice.
- Digital applications allow for regular practice sessions.
- Applications enable vocal exercises and allow for working on rhythm and intonation by singing with digital platforms.
- Technology facilitates access to opera, concerts, recitals, etc., today.
- It offers access to operas not staged in our country, as well as providing access to a wealth of useful information related to opera and vocal training. It also allows for following and learning from people involved in this field.
- It allows for practice with accompaniment at the desired key and time, without the need for an accompanist, thanks to applications that can change the key.
- If a work is in a foreign language, it provides immediate access to its translation.
- Students can easily learn the correct pronunciation and interpretation of the work they will be studying through video recordings, and improve their own interpretation in this area.

Example sentences:

Interviewee 5: One of the most beneficial effects of technological advancements on singing skills is the ability to listen to examples of musical works online. We can listen to examples from many master artists. It also contributes to accessing sheet music. Whether it's the stories behind the works or their staging, accessing them is much easier today thanks to technology.

Interviewee 7: Recording my voice and listening to myself helps me identify my mistakes. I can do vocal exercises with apps, and I can work on rhythm and intonation by singing with digital backing tracks.

Interviewee 12: I choose a piece, and without needing an accompanist, I can open it on YouTube at any time I want and practice in any key I want. If the key I want isn't on YouTube, there are apps that can change the key. If a piece is in a foreign language, we can immediately access its translation.

Interviewee 14: There is no area that technology hasn't entered or affected. We encounter technology all the time. It can be harmful or beneficial. It depends on how you use it. When used for educational purposes, it can be extremely beneficial. Voice recording programs, instructional videos, access to distance learning, online seminars, and recently even AI-based programs that provide feedback... I believe that nowadays, only those who are intrinsically unwilling to learn will fail to do so.

**Question 9 b):** When evaluating the responses to the question, “What kind of activities do you do with your instructor or on your own in class regarding the use of technology? What are your thoughts on the usefulness and necessity of these activities? Can you share an example from your own experience?”, the common opinion reached by prospective music teachers is this: Technological applications are very important for the development and diversification of students' singing skills because they offer a very useful, fast, and practical way.

The responses to the studies conducted are as follows:

- Access to sheet music and hard-to-find notes.
- Ability to select musical works.
- Ability to record and listen to audio recordings to identify and correct errors.
- Using websites to learn more detailed information about the works studied.

- Researching the history, composer, subject, story, and Turkish meaning of the work if it is in a foreign language.
- Studying works by listening to different performers to improve technical and interpretive skills.
- Developing critical thinking skills by listening to many artists.
- Watching videos on vocal training techniques and incorporating and re-applying them in the exercises done in the lessons.
- Combining the work done in the lesson with video resources found on the internet related to the work.
- Doing metronome exercises, breathing and vocal exercises from online resources.
- Watching excerpts from operas, concerts or solo performances with the instructor or on their own in the lessons.
- Correcting the pronunciation of songs written in foreign languages by listening.
- Performing the piece with piano accompaniment videos.

Example sentences:

Interviewee 3: In classes, my instructor and I analyze the piece I'm working on by listening to different performers. We also use technology by watching artists' performances to better understand the correct techniques. In my own work, I can incorporate techniques, exercises, and breathing exercises I see on the internet and through digital applications into my own practice.

Interviewee 4: I record my voice and listen to it, and I do exercises from online resources. Metronome and breathing exercises are also very helpful.

Interviewee 11: We watch concerts or solo performances. If there's an unknown song I want to sing, I can have them listen to it. If there's a part of the pronunciation of foreign songs that we're unsure about, we can listen to it. We can find hard-to-find notes.

Interviewee 18: My instructor and I use technology to understand the meanings of the lyrics of foreign works and to select pieces. When I do individual work, I use videos related to vocal exercises and techniques. I believe it's right to keep up with advancing technology and to use its benefits in my studies.

Interviewee 20: My instructor and I focus quite a bit on correct storytelling techniques and interpretation. I also individually watch video resources related to the work that I can find online, and I combine that with what we do in class.

### Category: Opinions and suggestions

**Question 10:** Regarding the question, "Do you have any different opinions and suggestions on how to improve your singing skills?", 19 students provided opinions and suggestions, while 6 students did not express any opinions or suggestions. The opinions and suggestions generally included the following:

- Since the process of voice production and singing are abstract concepts, they are very difficult to perceive and understand. Therefore, variety and imagination are very important in vocal training. Thus, the method may involve combining the experiences and techniques of many individuals and/or instructors.
- First and foremost, correctly perceiving and internalizing musical pieces is the most important step. Technical knowledge and exercises can be applied correctly on this foundation.
- Learning different and varied exercises for vocal training will be beneficial.
- Body and breath awareness exercises can be incorporated into vocal training.
- Information about vocal health and protection can be provided.
- The organs used in singing should be taught not only through explanation but also through demonstration (posters, skeletons, etc.).
- Digital resources related to vocal training can be recommended to students.
- A supportive and non-judgmental learning environment, along with supportive and encouraging approaches from teachers, will directly impact the development of self-confidence.
- Stage experience is also very important in the vocal training process. Therefore, giving students more opportunities to sing in front of an audience will significantly improve their self-confidence and interpretation.
- For students with stage fright, psychological support, breathing exercises, or group-based trust-building activities can be helpful.
- Singing is not just about technically correct singing; it also expresses creative and emotional meaning. This should be considered in vocal training classes.

- After the foundations of vocal training are properly laid and a sufficient classical repertoire is established, if appropriate, genres that the student enjoys listening to and singing can be included. In repertoire selection, if different pieces are chosen for each student, within their comfortable vocal range, suitable to their vocal characteristics, allowing them to showcase their voice, and which they can sing with enjoyment and acceptance, and where the pleasure of singing is prioritized, their enthusiasm and interest in singing can be increased.
- As with piano lessons, vocal training classes should include one Baroque, one Classical, one Romantic, and one Turkish piece each term. This ensures a thorough understanding and differentiation of the period of the works.
- Listening to and learning about songs from different cultures is also very important. This can enrich musical expression.
- Awareness of one's own voice is crucial, therefore regular and disciplined practice is essential for voice development. Alongside this practice, patience and energy can be important for improvement. Anyone who wants to improve themselves needs to research, listen, and practice extensively.
- Regardless of age and experience, learning and continuous development are ongoing. Therefore, one should always strive to add more to their knowledge and gain new experiences.
- Considering that the voice training process is long-term, lessons should not be crammed into a short period but should continue uninterrupted throughout the training years.

Example sentences:

Interviewee 6: To improve our singing skills, listening to songs from different cultures and getting to know those cultures is very important. This enriches our musical expression.

Interviewee 7: I think stage experience is just as important as technical training for improving singing skills. Being given more opportunities to sing in front of an audience significantly improves self-confidence and interpretation.

Interviewee 14: I think variety and imagination are very important. Since the process of voice production and singing are abstract things, it is a very difficult subject to perceive and understand. It often happens through imagination. Therefore, I don't think there is a single technique. The most suitable technique is the one that suits you best, that doesn't harm your voice, and that helps you produce the desired sound. The method that helps me the most is listening to the experiences and techniques of many people and/or instructors. With their perspectives, I create a broader picture and feel a sense of mastery.

Interviewee 17: For some students, the development of singing skills is not limited to technical training; it also requires strengthening self-confidence. Choosing the right repertoire, understanding the characteristics of the voice, and regular practice, along with a supportive and non-judgmental learning environment, are crucial. Teachers' supportive and encouraging approaches directly impact the development of self-confidence. Furthermore, considering that this is a long-term process, I believe that lessons should not be crammed into a short period but should continue uninterrupted throughout the academic years.

## CONCLUSION, DISCUSSION AND RECOMMENDATIONS

The aim of this research is to evaluate and make recommendations regarding the importance of developing the singing skills of prospective music teachers. Based on interviews with prospective music teachers, the following conclusions were drawn from the research findings:

- Developing the singing skills of prospective music teachers is crucial both during their undergraduate education and in their future professional lives. Because the human voice is the only instrument all humans possess, all music teachers should be able to sing at a sufficient level.  
In developing the singing skills of prospective music teachers:
- Acquiring technical knowledge and skills related to vocal training at both theoretical and practical levels is important and necessary.
- Gaining knowledge of theoretical topics such as the composer, period, genre, singing style, meaning of lyrics (if the work is in a foreign language), subject matter, and story of the work is important.
- Speaking exercises are important and necessary.
- Interpretation exercises aimed at correct, beautiful and effective performance of works are important.
- Choosing the right repertoire plays a significant role.
- Technological advancements play an important and influential role.

When the studies mentioned below regarding interpretation are evaluated, it is concluded that the vast majority of students generally completed the first 6 studies, 6 students completed all but the last item, and only 2 students completed all the studies.

- Expressing musical sentences through speaking exercises
- Nuance studies for better expression of musical sentences
- Knowing/learning the meaning of song lyrics written in a foreign language
- Gaining information about the subject/story of the works
- Expressing the works with a musical narrative in accordance with the lyrics
- Establishing a connection between the individual's life and memories and the emotion created by the lyrics and melody of the works
- Imagination studies related to the emotion created by the lyrics and melody of the works
- Examining the works from historical, social and philosophical perspectives

The activities undertaken by prospective music teachers to improve their interpretation of musical works include:

- Practicing breath and vocal techniques
- Trying to understand the work through its lyrics and musical structure
- Conducting research on the work and its composer
- Listening to the work performed by many different artists
- Listening to music and songs in different styles
- Attending musical events, operas, and concerts
- Reading articles about the human voice, participating in scientific events, and attending masterclasses
- Trying to learn how artists use techniques by listening, watching, and observing
- Actively following many opera pages on social media, communicating with opera artists, and learning about their techniques

### Discussion

The first sub-problem of the research, "What is the importance of developing the singing skills of prospective music teachers?", indicates that developing the singing skills of prospective music teachers is important both during their undergraduate education and in their future professional lives. Because the human voice is the only instrument all humans possess, all music teachers should be able to sing at a sufficient level. Singing is crucial for musical development, especially for children. It is also a skill that helps in conveying emotions, building self-confidence, and communicating. In this context, possessing advanced singing skills will equip prospective music teachers for their future careers and play a significant role in instilling a love of music in their students. Furthermore, since a teacher is a role model, a music teacher who uses their voice correctly and effectively will both set a good example for their students and motivate them.

According to Rao (1988), the art of singing requires mastery. Mastery in the art of singing is a way of "hearing the music, imagining the music, knowing the music, and performing the music." In this context, in order to produce music with the human voice, all parts of the vocal system must function as an artistic whole. The concept of the art of singing as a form of vocal art should be broad enough to encompass every aspect of vocal production, from acquired habit through training to practice-based skill, practice-based technique, and artistic creation. All of these are forms of learnable procedural knowledge, that is, ways of knowing how to do something. Art is tied to the practice of skills, no longer seen as isolated skills, but as technical skills. The art of singing as a vocal art can be defined as a fusion of action and awareness; in this sense, it is a unity of skill and understanding.

The most important means of communication and natural instrument of human is one's own voice. Using and preserving this voice through proper habits is possible with vocal training that begins at a young age. The fundamental goal of music education is to train a child's voice and enable them to sing correctly. In line with the goals of music education, the teacher's own voice is the most frequently used tool in the process of creating behavioral changes in the student. One of the basic principles of the Kodaly method, a contemporary approach to music education, is the idea that everyone can use their own voice as the most suitable, accessible, and inexpensive musical instrument in learning and developing music. According to Kodaly, the human voice is the foundation of music. Singing prepares the ground for and helps in the development of other musical instruments. Not all children have the ability to play an instrument, and it is difficult for everyone to own one. However, every healthy child possesses their own voice, their most beautiful and natural instrument (Yiğit, 2000). In this context, it is extremely important for a music teacher, who serves as a role model for their students, to be a competent vocal trainer who sings well.

Regarding the second sub-problem of the research, "What is the importance and role of acquiring technical knowledge and skills in vocal training at the theoretical and practical levels in developing the singing skills of prospective music teachers?", the common opinion of prospective music teachers is that these acquisitions are important. These acquisitions will make prospective music teachers more conscious and equipped, helping them to recognize their own voices, understand vocal physiology, and ultimately perform the art of singing more accurately. Conscious learning will accelerate and facilitate the learning process by ensuring technical development. It will also contribute to the healthier and longer-lasting use of the voice. In conclusion, it will greatly contribute to the acquisition and development of singing skills, thus enabling individuals to become more competent and professional in the field of music teaching and vocal training.

According to the scientific approach, the act of singing, which is a "coordinative process," involves both acquiring knowledge about the voice and practicing by adapting the voice as needed. Similarly, Appleman (1986: 9), who defines singing as "disciplined expression," states: "Psychophysically, artistic singing is a dynamic act of instantly coordinating the physical sensations of respiration, phonation, resonance, and articulation to transform these processes into disciplined expression."

According to Howard (1982), the ability to sing artistically requires a combination of scientific understanding of the voice and practical ability to control it. However, while knowledge of the lungs, vocal cords, etc., can contribute to successful tone production, the application of this knowledge should be realized through vocal practice rather than verbal explanations. This is the difference between singing theory and the art of singing. Singing theory requires only scientific knowledge. The art of singing, on the other hand, requires the ability to put scientific knowledge into action. Such sensitivities are achieved through instantaneous awareness of vocal processes, including:

- awareness of vocal functions (breathing, phonation, resonance, and articulation);
- assessment of changes occurring during singing (changes in pitch and rhythm depending on changes in vocal cord movement); and
- the ability to replicate these changes.

According to Sabar (2008), a person's vocal potential and talent can be developed through high-quality vocal training with a skilled instructor, a solid theoretical foundation, and mostly correct and appropriate practice. In this context, it is advisable to follow a progression from easy to difficult and from simple to complex, providing explanations and exercises that the trainee can comprehend. Given that the human voice possesses a lively, natural, and sensitive structure, its training requires equally sensitive, careful, dedicated, and patient work. In this regard, Cynthia Hoffmann (2003) emphasizes that the role of a vocal coach is to "help young students become artists who can express themselves more freely in terms of musical performance" and to support their musical performance and expression skills physically, spiritually and mentally" (cited in Jung, 2010). Furthermore, Santelli (2023) argues that the technical objectives set by instructors in voice training should ideally encompass broad realities related to vocal function and, ultimately, avoid imposing personal ideals that could limit individuality.

The third sub-problem of the research, "What is the importance and role of theoretical knowledge regarding the composer, period, genre, singing style, meaning of lyrics (if the work is in a foreign language), subject matter, story, etc., in developing the singing skills of prospective music teachers?", indicates that these acquisitions are important. These acquisitions contribute to a more accurate understanding of the work, allowing for a more precise interpretation by understanding, feeling, and reflecting the intended emotion. Therefore, it leads to a confident, beautiful, and meaningful performance. Besides contributing to a better understanding of the work, its period, and the composer's intentions, it also encourages learning about different periods and composers. Furthermore, it contributes to an enjoyable performance by immersing oneself in the work. In short, it contributes to musicality through a correct, beautiful, and effective performance.

According to Hemsley (1998), when working on a song lyric for a good interpretation, the following should be considered: "meaning, basic rhythm and beats, the sounds that make up the lyrics, and where new musical phrases emerge (each musical phrase is a new musical expression)." Meaning is especially important for songs written in foreign languages. Therefore, songs written in foreign languages need to be translated accurately and carefully. The pronunciation of every word in the song should be understandable, and its meaning should be pleasing through aesthetic expression. At this point, it is important to answer the following basic questions:

- What is the poet or lyricist saying? What is the content of the text and what emotions are expressed? Is the singer telling a story or acting out a scene? Or is he/she expressing personal thoughts? Is the song a

prayer or a meditation? The singer should categorize the song and have a clear mind about the general nature of the message he/she wants to convey to the listener.

- Who is singing the song? Is it a clearly defined character, as in an opera or musical, or just the singer? At this point, it is important to remember that most songs express the feelings and thoughts of young people.
- To whom is the song being sung? This is sometimes clearly evident from the lyrics, as in opera, but not always. Since singing is a form of communication, there must be not only someone communicating, but also someone being communicated with. This could be the world in general, God, a friend, a lover near or far, a hated enemy, a direct audience, or the singer themselves. Ultimately, the listener must be involved.
- What is the mood and atmosphere in the song? The range of moods is almost infinite. If singers have trained themselves to convey different moods accurately and clearly with their voices, they can allow themselves to be guided by intuition and imagination. However, they must know the mood they are expressing. If they have only trained themselves in vocal technique, then their only tools are variations in musical nuances and lyrics.

According to Webb (1946), every song has a message it wants to convey, and whether expressed through music or words, recognizing this message is necessary for faithful interpretation. Once this recognition is achieved, the outline of one's interpretation emerges. Then the song must be placed in the correct category. To what period or style does it belong? Should it be considered an atmospheric or melodic song? Is it narrative, descriptive, or subjective in mood? Does it have any extraordinary musical features? What is its structure? Where are its most important points? Where is the climax, and what part of all this does the accompaniment encompass? One must ask oneself all these questions, returning to the original repeatedly. Furthermore, it is important to find answers to the questions, "What does this song want to convey, and how can I express it, how can I use my voice, how can I look, how can I feel to reveal the meaning of the song?" At this point, artistry and technique must work together.

Webb (1946) states that the concept of style, which is difficult to understand, largely depends on the ability to place a song in the correct category by evaluating its origins and historical background. Examining the development of a song and understanding how the composer and poet interacted with each other in different periods is indispensable. In this context, informing the student about the selected works (the composer, genre, period, style of performance, culture to which it belongs, subject matter, meaning of the lyrics, musical structure, etc.) in vocal training classes is important in terms of laying the foundation for a much more effective training process focused on trust, harmony, and success between the vocal coach and the student (Ekici, 2020).

The fourth sub-problem of the research, "What is the importance and role of speaking exercises in developing the singing skills of prospective music teachers?", indicates that speaking exercises are important and necessary in improving singing skills. Speaking exercises contribute to making the song understandable and fluent. Especially in works written in foreign languages, correctly pronouncing words and knowing their meaning will directly reflect in the expression. To preserve the meaning of the work, it is important to sing correctly without distorting its meaning and emotion, especially if the work is in a different language; singing as well as native speakers is crucial for keeping that culture alive. Speaking exercises are also important for enabling a person to offer the listener a more pleasant and aesthetically pleasing listening experience, both technically and emotionally, while singing.

A music educator is someone who instills, develops, and serves as a role model for musical behavior. One of the most important tools for developing musical behavior is singing. Singing correctly, beautifully, and effectively depends on speaking correctly, beautifully, and effectively. From this perspective, a good music educator is expected to have a good command of their native language, a good understanding of the phonetics of Turkish and foreign songs, and to exhibit language-enhancing behaviors while teaching students songs. In this context, the education provided in institutions that train music teachers should address speaking and singing together, and the necessary skills should be imparted to individuals at both theoretical and practical levels. The key to singing is ensuring that the lyrics reach the audience clearly and understandably. Achieving this will balance the perfection of diction with performance skills. Therefore, a good singer should be able to use their voice both as a musical instrument and as a means of communication.

Although there are differences between speaking and singing, the basic mechanism, especially the physical processes, are the same, so singing is, in a sense, called extended and enhanced speech. Individuals skilled in both

can easily and comfortably transition from one to the other. Considering speech as the foundation of singing, many of the basic principles of singing, especially those related to posture (correct and balanced stance in accordance with the body's anatomical structure), breathing, and articulation, can be learned during speech at a comfortable vocal level. On the other hand, the desire and enjoyment of singing are a great aid in developing and maintaining rich, powerful, and beautiful speech sounds (McKinney, 1994).

According to Vennard (1967: 184), the word diction, which means choosing the right words to express thought, is used in singing to describe the best articulation of words. In this context, the subject can be approached from the perspective of clear and understandable pronunciation and good expression. To ensure correct pronunciation in a song, sounds should be produced as close to natural speech as possible, and care should be taken to ensure that each syllable is clear and audible. This requires being free from the anxiety of legato (singing or playing the notes of a musical piece without interruption), mental and physical relaxation, and controlled use of breath.

Kagen (1960) approaches the subject as follows: In order to achieve correct, beautiful, and effective expression in speaking and singing, it is very important for individuals receiving vocal training to use language correctly and to pronounce words clearly and intelligibly. Therefore, the fundamentals of speaking should definitely be considered a priority subject in the music education undergraduate program and should continue from the first year until the completion of the education.

The fifth sub-problem of the research, "What is the importance of correct, beautiful and effective interpretation of musical works in developing the singing skills of prospective music teachers, and what studies should be conducted for this purpose?", indicates that interpretation studies are important in developing singing skills. A good interpretation is important in showing due respect to both the composer and the audience. Singing is not only about correctly reading the notes and the song, but also about reflecting emotion. In this context, a good interpretation highlights the beauty of the work, leading to greater enjoyment for the listener. One of the most important aspects of musical expression is understanding the message of the work, correctly interpreting its spirit and emotion, and conveying this to the listener. Therefore, the more beautifully a work is interpreted, the more beautiful the impact it leaves. In short, when performing a work, technical skills must be integrated with emotional and artistic expressive power.

In general, technique, interpretation and expression are a whole in the performance of musical works. Therefore, in developing the singing skills of prospective music teachers, it is important and necessary for them to acquire interpretive and expressive skills in addition to technical knowledge and skills in vocal training at the theoretical and practical levels. While the correct, comfortable, and beautiful performance of a piece is supported by technical skills, the aesthetically pleasing and enjoyable performance of the piece is achieved through interpretive studies. On the other hand, the main goal in vocal training is the correct, beautiful, and effective interpretation of works with an aesthetic understanding.

Aesthetics and technique are two inseparable and essential elements of art. Aesthetics is associated with beauty, without which art cannot truly exist or be fully appreciated. Technique, on the other hand, refers to the skillful execution of an activity in the most effective manner and represents the realization and application of theoretical knowledge (Kaygısız, 2017). Like all art forms, the art of singing possesses both technical and aesthetic dimensions. In order to achieve aesthetic excellence, a singer must overcome technical challenges (Marchesi, 1986). However, this should not mean neglecting the aesthetic aspect of the art of singing by giving weight to its scientific and technical aspects. Approaching singing not solely from a scientific or technical perspective, but also as an aesthetic art from a philosophical standpoint, allows for a deeper understanding of the depth and sublimity of the art of singing. Such an approach ensures that performance skills become more accurate, expressive, and effective, as well as more balanced, stable, and consistent. In this context, vocal training should address both the technical and aesthetic aspects of the art of singing, offering an experience in which the three fundamental dimensions of human existence—mind, body, and soul (emotion)—function in complete harmony. Ultimately, efforts should be made to interpret musical works through an experiential process that fully reflects the emotions of the soul.

Webb (1946) states: "The truth is, the better the performance, the more relaxed, captivated and distanced from criticism the listener becomes. Good interpretation is certainly not something very conspicuous... I think most people would agree that the essence of interpretation is the ability to quickly grasp the essence and content of a song and to convey its message clearly and precisely... Interpretation begins with capturing the spirit of the song; whether this spirit is expressed in the music or the words, once this fundamental importance is grasped, there is no escaping it. This approach to interpretation identifies the singer with the song in such a way that it confines him to his own little world." According to Webb (1946), the singer sometimes becomes the narrator of an exciting

or interesting story, and sometimes sings about himself, expressing his own thoughts and feelings. Of course, it is a fact that, with regard to various song genres, no artist will use the same colors or apply them in the same way.

According to Hemsley (1998), atmosphere in a song can be considered objectively in terms of the mood created in the singer by a scene from a musical, opera, or musical film, or by the situation that inspired the music and text. Accordingly, for example, a crimson sunset does not have an atmosphere/meaning in itself. This comes from the subjective reaction of the poet and composer. In this context, singers, as a requirement for a good interpretation of a song, must recreate the situation that gave rise to the poem and music in their imaginations, react to this situation and thus convey the atmosphere by singing.

The sixth sub-problem of the research, "What is the importance and role of choosing the right repertoire in developing the singing skills of prospective music teachers?", indicates that choosing the right repertoire plays a significant role in improving singing skills. Choosing the right repertoire is primarily important for protecting vocal health and using the voice correctly, comfortably, and effectively. Furthermore, it is crucial for interpreting a piece correctly, beautifully, and effectively from a technical and musical perspective, and for doing justice to the composer and the work. A good repertoire will enable students to recognize their own vocal characteristics and come to class more willingly. Therefore, choosing the wrong piece can both discourage a student from the class and seriously damage their voice, resulting in a below-average performance. In this context, choosing a piece that suits one's taste and talent will allow them to interpret the piece comfortably and confidently, and with enjoyment and willingness. Because pieces that allow a person to showcase their best talent are important for both the singer and the listener.

Repertoire is a critical component of the teaching process at all levels of music education, and there is a need for further examination of repertoire selection practices for vocal training, particularly by music educators at the university level. The repertoire that music educators choose for their students is essentially the curriculum. A musical work rich in concepts encompassing musicality, performance, history, cultural awareness, and aesthetics is a tool that enables students to acquire these skills and meets the instructors' goals (Forbes, 2001). According to Luckstone (1948), instructors should be "competent and experienced" in this regard (cited in Stephenson, 2013).

Young students in the initial stages of vocal training are at a critical point in terms of musical and physiological development, and repertoire plays a crucial role in this development. If the repertoire is chosen correctly at this stage to capture the student's musical interest, the student can safely develop their voice, musicality, and technical skills. If the repertoire selection is incorrect, vocal health will be jeopardized, and their love of music and musical enthusiasm may be irreversibly damaged. In this context, the repertoire should deeply engage the student's interest in music, earning their appreciation and admiration, for further practice and study. Songs, because they are meaningful and connected to emotions and intellect, allow the student to focus more on the fundamental processes of the voice (posture, mental-spiritual and physical comfort, breathing, producing the voice in the correct position, etc.) (Jung, 2010).

According to Rock (2005), each student is different in terms of personal and musical characteristics, and therefore repertoire selection is largely subjective. Thus, the goal of a vocal coach should be to enable the student to understand and learn how to use their own voice to develop their natural vocal ability. In this context, vocal coaches must know each student's vocal characteristics, age, vocal maturity level, needs, developmental level, talent level, musical capacity, and language skills in order to select literature suitable for their voice. It is also important to know the student's personality and personal preferences regarding the emotional expression required by the music. Finally, the selected literature should not hinder the technical developments gained through vocal training.

The seventh sub-problem of the research, "What is the importance and role of technological advancements in improving the singing skills of prospective music teachers?", indicates that technological advancements play a significant and effective role in improving singing skills. With technological advancements, access to many works, study techniques, and theoretical information has become easier and faster. Technology allows access to the sheet music of musical works, and not only that, but also to see performances in different styles, listen to examples of works from many master artists and develop critical skills. Thanks to online lessons, students can improve their voice and singing skills with an instructor. Sound recording devices, computer programs, and various applications offer the opportunity to record and listen to the sound, analyze it, and identify errors, as well as providing opportunities for both analysis and evaluation by improving the voice. Digital applications allow for regular practice, working on rhythm and intonation by singing with digital platforms, and singing along to songs, as many songs also have karaoke versions. Thus, it's possible to practice with accompaniment at any time and in any key, without needing to find an accompanist, thanks to applications that allow for key changes. Furthermore,

students can immediately access translations of works in foreign languages, easily learn the correct pronunciation and interpretation of the piece through video recordings, and improve their own interpretation. Today, technological applications also offer easy access to events such as operas, concerts, and recitals, providing access to events not staged in our country, as well as access to a wealth of useful information about opera and vocal training, allowing students to follow and learn from those involved in this field.

21st-century educational trends are replacing traditional models that prioritize rote learning and memorization with models that cultivate students who can think critically and solve problems. Today, students have high expectations regarding their ability to access, evaluate, analyze, and synthesize information. Technology, which supports the application of active learning models, is adaptable to different learning styles and provides motivation for students with specific learning needs. Technology, now integrated into curricula at all levels of education, offers new opportunities in many areas for both teachers and students. Individuals are increasingly using technology to acquire knowledge through their own experiences and discoveries. They can then apply these newly developed thought systems to their personal lives and subsequently to their professional lives.

Traditional music education has become highly effective and multifaceted in many countries around the world with the support of technology. Technologies included in the curricula of higher education institutions providing professional music education are transforming the music learning environment into a technological learning center. Technologies such as MIDI, computers, software, the internet, television, DVDs, CDs, CD-ROMs and electronic instruments used in these schools improve the knowledge, skills and performance of future musicians and music educators and increase their creativity and motivation (Tecimer Kasap, 2007).

According to Arappirlioğlu (2003), technology, which brings a new perspective to the understanding of education, also provides students with a comprehensive educational opportunity in music education. Technological tools guide students in actively making music, enabling them to strengthen their creativity by creating their own original compositions with pleasure through active participation. As a result of many studies, it has been observed that thanks to the application of technology in music education, music lessons become more interesting for students, help them gain self-confidence, provide more efficient and effective learning, strengthen group work, positively affect critical thinking and problem-solving skills, enable the understanding of music in its scientific and artistic dimensions, and increase enjoyment of music lessons through active participation. This situation is extremely important in the development of students' ability to interpret musical works. Thus, while technology adds an active participation and intellectual dimension to music, it also significantly contributes to the development of students' interpretation skills.

McCoy (2014) notes that technology affects singing in many ways beyond voice analysis. According to the author, aspiring singers heavily utilize internet resources to promote themselves and advance their careers, including social networks and personal websites. Establishing a group on Facebook is often the most effective and efficient way for vocal coaches and choir/orchestra conductors to connect with their studios or communities. Furthermore, an increasing number of singing teachers are offering lessons via video conferencing over the internet.

### **Recommendations**

The following recommendations are presented based on the results of the research:

1. For prospective music teachers, using their voice naturally and healthily, as well as correctly, beautifully and effectively, is crucial for becoming more knowledgeable, confident and successful, both during their undergraduate education and in their future professional lives. In this context, vocal training courses should be conducted with this understanding and emphasis should be placed on developing students' singing skills.
2. In developing the singing skills of prospective music teachers, theoretical knowledge related to vocal training (human voice, its characteristics, voice types, voice production processes “breathing, phonation, resonance, articulation”, etc.) should be emphasized and included in the lessons.
3. In vocal training classes, sufficient emphasis should be placed on the development of technical knowledge and practical skills at the application level. These include correct posture; mental, emotional and physical relaxation; proper breathing techniques and breath control; establishing an effective voice–breath connection; and producing a healthy and accurate vocal tone. In addition, instruction should address resonance, register transitions (head voice, middle range, and chest voice) and clear articulation. Students should also be made fully aware of the fundamental importance of these components in achieving sustainable and effective vocal performance.
4. Providing information on the theoretical aspects of musical works—such as the composer, historical period, genre, performance style, the meaning of the lyrics in the case of foreign-language works, as well as the subject

matter and narrative—lays a more solid foundation for engaging with the pieces and, in turn, enhances students' singing skills.

5. Emphasis should be placed on speaking exercises, especially for songs written in foreign languages, with diction, pronunciation, and articulation exercises. This work will show respect and care for the language in which the work was written, and the performance will be more accurate and aesthetic.

6. Emphasis should be placed on the accurate, beautiful, and effective interpretation of works, as well as on theoretical and technical studies, and due diligence should be given to efforts aimed at this goal. In addition, it would be beneficial to encourage students to participate in scientific activities, read publications on the human voice and its training, listen to different musical and singing styles, attend concerts, and engage in similar activities.

7. In individual voice training lessons, careful consideration should be given to selecting repertoire that is appropriate for each student and their specific needs. This is essential not only for the student's vocal health and technical and musical development but also for fostering their interest, curiosity, motivation and engagement in the lesson, ultimately ensuring more effective and high-quality instruction.

8. The importance of technology in education today is undeniable. In this context, students should be guided on the significance and proper use of technology in developing their singing skills, and technological applications should be appropriately integrated into lessons.

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