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# Research-to-Resource: Initial Steps in Vocal Technique for Boys Experiencing Difficulty With Phonation During the Adolescent Voice Change

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Abstract  
\*\*\* Research-to-Resource Manuscript \*\*\*

This research-to-resource article reports pedagogical implications of several types of research literature. This literature collectively focuses on boys' adolescent development, with specific attention to psychological and sociological implications on the teaching of vocal technique during the period of voice change. From this foundation, the concept of breath control is identified as a relatively stable process during adolescence, providing teachers and their students a beginning point for conversations about the developing voice and explorations of rudimentary vocal technique. This article describes a step-by-step process for approaching these pedagogical conversations and singing explorations.

Implications

- Researchers have documented that adolescent boys seek control over their changing bodies. This desire for control extends to the processes of singing, even during the period of voice change. Teachers may find that a focus on the relatively stable process of breath control (inhalation, exhalation) may engender conversations about developing vocal anatomy, function, and singing technique.
- Teachers may find that a focus on breath control can assist boys who are struggling with phonation and/or basic singing activity during the voice change.
- The establishment of terminology and experiences related to vocal technique can assist in the processes of transition and retention as boys progress enter and then graduate from their years as middle school/junior high school singers.

## INITIAL STEPS IN VOCAL TECHNIQUE FOR BOYS EXPERIENCING DIFFICULTY WITH PHONATION DURING THE ADOLESCENT VOICE CHANGE

The vocal challenges of adolescent boys with changing voices are well documented. One goal of middle school choral teachers is to retain boys who sang during their elementary years, and another is to recruit additional boys, many of whom lack prior, foundational experience and instruction in singing (Fisher, 2014; Freer, 2012). Boys in the latter group can be reluctant to sing due to vocal difficulties resulting either from prolonged singing inactivity or from inexperience coordinating the technical skills of singing with their changing voice (Graff, 2016; 2012).<sup>1</sup> Many teachers don't know how to gain the trust of boys who experience difficulty with singing—or even with phonation itself—during their voice change (Hollien, 2012; Thurman, 2012). Research indicates a potential answer.

Much about the boy's changing voice is established knowledge. This includes the stages of male vocal development, the singing ranges that accompany those stages, and the sociological/psychological factors that influence the likelihood that a boy will continue singing during this period (Cooksey, 2000a, 2000b; Freer, 2015, 2016). This research-to-resource article explores how this information can be combined to suggest strategies for working with boys who experience singing difficulties as their voices are changing.

Research indicates that adolescent boys crave control (Freer & Tan, 2014; Monks, 2003). They seek to control their voices while singing just as they are fascinated by the physical control that results from the developing musculature throughout their bodies (Fuchs et al., 2009). After all, singing is a physical, athletic activity that draws upon muscular coordination and its related bodily sensations. Teachers often begin work with adolescent male singers by focusing on

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<sup>1</sup> The term “boys” is used to describe adolescents with characteristic male vocal anatomy.

matching pitch and identifying vocal range and tessitura. This is not always optimal, and it is frequently futile and frustrating for both the singer and his teacher.

Teachers can, instead, redefine their work with these boys away from an emphasis on pitch, repertoire, and performance. Instead, teachers can embrace boys' need for physical control by orienting instruction toward vocal technique. When boys are able to confidently meet the musical challenges presented to them (i.e., sing the repertoire), they are more likely to continue singing because they view themselves as able to exert a measure of physical control over their rapidly developing musculatures. This has been recently documented through numerous interviews with boys on several continents (Freer, 2017). One finding from this research is that many boys would rather learn vocal skills/technique than learn repertoire. Once they have experienced success in singing, boys feel more comfortable singing in choral ensembles and public performances. Wiggins has written about the need for music teachers to find "doorways in" where students seamlessly pass from one room (what they know) to the next (what they need to know). Wiggins states that "doorways in" help teachers "create lessons that will maximize learner understanding of the music and musical processes" (2014, p. 36). Allsup has drawn upon the arts education philosophy of Maxine Greene when writing of the need to create "opening spaces" (2003a, p. 35) through their work with young people. These metaphorical spaces provide opportunities wherein "students and teachers are free to define and redefine who they are, where students can come together to speak (or perform, or sing) about a common world" (Allsup, 2003b, p. 165).

How, then, can teachers begin the process of teaching vocal technique to boys? Much of the professional literature emphasizes a pitch-related approach. Instead, the "doorway in" often lies in the precursor to phonation itself: breath control. The word "control" is key here, since

singers can control the processes of exhalation and inhalation. A quick Internet search reveals that the term “breath control” is broadly used throughout the professional literature in a wide array of settings and contexts. While it is common in the specific discipline of vocal-choral music to instead use the phrase “breath management,” management implies control. Indeed, research indicates that adolescent boys seek control of their voice during the adolescent voice change (Ashley & Mecke, 2013; Freer, 2011; Fuchs et al., 2009).

It follows that teachers need to provide boys with the knowledge and skills that can establish a sense of control over the respiratory process—the foundation for all genres and styles of singing. So doing may cause teachers to shift from thinking of themselves as choral music teacher-conductors toward thinking of themselves as singing teachers who use choral literature to help students practice and refine the vocal techniques they have learned. This is a subtle shift, from “choral music teacher” to “group voice teacher.” But, the shift is informed by research and aligned with how adolescent boys learn and build positive images of who they’d like to become in the future (Freer, 2010).

### **Five Reasons for A Focus on Breath**

There are many reasons for beginning with a focus on breath; five of them are listed here. They are equally relevant for male and female singers. The point is that breath control is the logical place to begin the exploration of vocal technique for boys with changing voices—rather than beginning with pitch matching. Female singers obviously need to breathe, too, and these reasons are equally true for them.

First, the vital capacity of the lungs—the maximum amount of air that can be expelled—increases concurrently with the adolescent boy’s adolescent voice change. Expelling the air begins with a contraction of the abdominal muscles. Instead of asking students to “exhale” or

“breathe out,” teachers can more specifically ask students to “contract your abdominal muscles.” Teachers can lead students to notice how much air they can expel. This is often a surprise to the singers, and teachers can tie the physical sensation to the concept of sustained breath flow for musical phrasing.

Second, the rate at which air is expelled is controlled by the rate at which the abdominal muscles are contracted; this has a direct effect on dynamics. Instead of exhorting students to “sing more loudly” or asking for a decrescendo, teachers can ask them to vary the speed of the airflow by varying how they contract their abdominal muscles as they exhale. Players of woodwind and brass instruments learn these techniques early in their training, and many of the boys in middle school or junior high school vocal/choral music classes will be familiar with the principles.

Third, though it might seem counterintuitive, inhalation follows exhalation (Tu, Inthavong, & Ahmadi, 2013). The process of exhalation creates a vacuum in the lungs. Inhalation is a response to that vacuum. Drawing students’ awareness to breath control may be most easily accomplished when they are asked to notice something that they are already doing. So, teachers might focus on inhalation after exhalation rather than asking students to “take a deep breath” without first asking for a conscious exhalation. Students may be able to then notice how their abdominal muscles expand as they inhale, and that the inhalation process can be slow or rapid. This approach is purposed to achieve the intended goal of singing “from your diaphragm” but may more immediately effective since the abdominal musculature can be voluntarily controlled and diaphragmatic control is involuntary.

Fourth, a sustained and controlled airflow during exhalation is necessary for efficient phonation. The edges of the vocal folds are drawn together during exhalation to produce a

pitched singing sound. The more that adolescent boys can create a steady airflow through conscious control of their abdominal musculature, the more that they will increase the opportunity for easy phonation on the pitches they intend to sing. The length and, to a lesser degree, the thickness of the vocal folds change during adolescent male development (e.g., Cooksey, 2000b). Vocal-choral teachers can build on students' awareness of airflow during exhalation to begin discussions of phonation, changes to the vocal folds, and the resultant changes to singing pitch during adolescent development.

Finally, concepts of vowel shape, consonant production and pharyngeal space may become more tangible if singers think of how airflow interacts with the articulatory structures of the mouth (tongue, teeth, soft palate, etc.). What begins as airflow into the body during inhalation is transformed into sound waves during exhalation/phonation. Air then passes outward through the pharynx and oral cavity during singing, and vocal-choral teachers can speak about “shaping or interrupting the airflow” as a way to enable understandings of vowels, consonants, and resonance.

### **Toward Processes and Goals**

How is it possible to teach principles of technique when the voice is changing, sometimes in seemingly unpredictable ways? Teaching vocal technique to adolescent boys in the midst of voice change may seem like an oxymoron. Breath control is perhaps the most reliably stable component of vocal production during the adolescent vocal development (Ashley, 2013). Breath control is exclusive of pitch, vocal register, timbre, and music reading skills. Breath control is relatively silent, allowing boys to experiment on a component of vocal technique without risk of embarrassment or failure. When boys are made aware of the muscular activity behind exhalation

and inhalation, they may experience an immediate change of sensation and perception that makes the un-tactile process of singing seem more tangible.

Moreover, a focus on breath control with adolescent male singers affords teachers and students a common vocabulary about musical concepts and vocal skills. It allows for specific conversation about a large percentage of the body's muscular/skeletal system. These conversations can begin to explore the relationship between physical movements both small (abdominal contraction) and large (swinging of arms, etc.) and their effects on vocal production. Such conversations can lead to student understandings about the connection between a conductor's gestures and the resulting singer response.

Ultimately, though, the goal is one that teacher-conductors of young adolescent boys will not see. The goal is for these boys to be singing—perhaps in choirs—as they mature through high school, into adulthood, and into their later years. The teacher's goal must be to provide adolescent boys with the musical confidence and vocal skills to sing whenever and wherever they choose. Focusing on breath is a starting point in the conversation, a “doorway in” to the application of vocal technique that will endure across the years.

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